

INCH-POUND

MIL-C-70998(AR)
18 February 1992

MILITARY SPECIFICATION

CONTAINER, SHIPPING AND STORAGE, CARTRIDGE, 25mm, PA125
GENERAL SPECIFICATION FOR

This specification is approved for use by the U.S. Army Armament, Munitions and Chemical Command, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers the general requirements for Container, Shipping and Storage, Cartridge, 25mm, PA125, hereinafter called 'the container'. The container is used for holding ammunition during usage, shipping and storage. (See 6.1).

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications, standards and handbooks. The following specifications, standards and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issue of these documents shall be those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation. (See 6.2).

SPECIFICATIONS

FEDERAL

TT-C-490 -Cleaning Methods and Pretreatment of Ferrous Surfaces for Organic Coatings

MILITARY

MIL-W-63150 -Weapons and Support Materiel Standard Quality Assurance Provisions for
MIL-W-12332 -Welding, Resistance, Spot, Seam, and Projection; for Fabricating Assemblies of Low Carbon Steel

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, U.S. Army ARDEC, ATTN: SMCAR-BAC-S, Picatinny Arsenal, New Jersey 07806-5000 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 8140

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STANDARDS

MILITARY

| | |
|-------------|---|
| MIL-STD-171 | -Finishing of Metal and Wood Surfaces |
| MIL-STD-406 | -Visual Inspection Standards for Terne Plate Cans and Steel Boxes Used in Small Arms Ammunition Packaging |
| MIL-STD-414 | -Sampling Procedures and Tables for Inspections by Variables for Percent Defectives |

(Unless otherwise indicated, copies of federal and military specifications, standards and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094)

2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

DRAWINGS

U.S. ARMY ARMAMENT, RESEARCH, DEVELOPMENT AND ENGINEERING CENTER (ARDEC)

| | |
|----------|--------------------------------------|
| 12576143 | -PA125 Ammunition Container Assembly |
| 12576144 | -Body Assembly |
| 12576152 | -Cover Assembly |

(Copies of specifications, standards, handbooks, drawings, and publications required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

2.2 Non-Government publications. The following document(s) form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DOD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the document cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

| | |
|-----------|--|
| ASTM B117 | -Method of Test for Salt Spray (fog) Testing |
|-----------|--|

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(Application for copies should be addressed to The American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document shall take precedence. Nothing in this document, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Materials. Materials shall be in accordance with the applicable drawings and specifications.

3.2 Components and assemblies. The components and assemblies shall comply with all requirements specified on Drawing 12576143, all associated drawings, and with all requirements specified in applicable specifications and standards.

3.3 Temperature.

3.3.1 Elevated temperature (storage). The container shall not suffer permanent damage when subjected to the constant temperature of +163° minimum for a period of 24 hours (after temperature stabilization) and shall meet the requirements of 3.4 when returned to a minimum temperature of 50°F.

3.4 Performance.

3.4.1 Cover assembly. The locking hardware shall be operable manually. The cover assembly shall be removable manually without the use of exorbitant force. The gasket shall remain secure in the correct position within the cover upon removal of the cover assembly. The gasket shall not stick to, be cut or split by contact against the top edge of the body assembly. The cover shall be completely removable manually, without special tools, without the use of exorbitant force and shall be easily resealed.

3.4.2 Hasp and latch. Mating parts of the body hasp and latches shall engage without requiring deformation of any container part and the latches shall close and open freely. When closed the latches of the assembled container shall remain closed until manually opened.

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3.4.3 Spring loaded handles. Handles shall be spring loaded. Handles shall be extendable without the use of exorbitant force (not to exceed 5 lbs.). Handles shall retract to within mounting hardware when not in use.

3.5 Airtightness. The assembled container shall withstand, without leakage, a minimum air pressure differential of three pounds per square inch (PSI).

3.6 Welding procedure. Fabrication of the container shall be in accordance with the recorded welding procedure requirements of MIL-W-12332.

3.7 Protective coating.

3.7.1 Pretreatment. The cleaning method and pretreatment process used shall comply with the requirements of Dwgs. 12576144 and 12576152. The phosphate coating shall comply with finish 5.1.1 of MIL-STD-171.

3.7.2 Paint. The paint coating shall comply with the requirements of Dwgs. 12576144 and 12576152. In addition, the coating shall comply with the requirements of MIL-STD-406. Adhesion of the paint to the pretreated surfaces shall comply with applicable requirements of MIL-STD-171, Finish 5.1.1.

3.7.3 Corrosion resistance. The exterior surfaces of the box shall show no visible evidence of paint blistering, creepage (loss of adhesion) or corrosion of base metal in excess of 1/8 inch on either side of the score marks or rusting of parts of the hardware subject to pressure or abrasion in normal use or exceeding the standards permissible in MIL-STD-406, after exposure to a 5% solution of salt spray for 80 hours.

3.8 Gasket compression. The gasket compression of the container shall be as specified by Dwg. 12576143.

3.9 Weld security.

3.9.1 Hasp assembly. Each hasp of the body assembly shall comply with the weld security requirement of Dwg. 12576144 without permanent deformation or failure of a weld.

3.9.2 Handle assembly. The handles of the body assembly shall withstand a pull of 600 pounds, minimum, without permanent deformation of a component or failure of a weld.

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3.9.3 Latch assembly. The latch assemblies of the cover assembly shall comply with the weld security requirement of Dwg. 12576152 without breakage or permanent deformation of any components or welds.

3.10 Concavity and convexity.

3.10.1 Cover assembly. The cover assembly shall meet the requirements of Dwg. 12576152 for flatness.

3.10.2 Body assembly. The top edges of the body assembly shall meet the requirements of Dwg. 12576144.

3.11 First article. When specified in the contract or purchase order, a sample shall be subjected to first article inspection in accordance with the technical provisions herein (see 4.3).

3.12 Workmanship. The workmanship requirements of the Container Assemblies shall be visually examined to determine compliance with the following requirements. The quality of workmanship shall not adversely affect safety, function, performance, serviceability and appearance. Completed parts and assemblies shall not exhibit defective material or processing such as: cracked or split components, extraneous material, steel slivers, burrs or sharp edges, scores and gouges, mutilated metal components, missing operations, improper assembly, missing parts, stains, corrosion, nonspecified oxidation (rust), unauthorized salvaging operations (e.g., hammering to shape, repair by welding (except for bottom seam weld) straightening, bending, etc.)

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may utilize his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

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4.1.1 Responsibility for compliance. All items must meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling in quality conformance does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to acceptance of any defective material.

4.2 Classification of inspections. The following types of inspection shall be conducted on this item:

- a. First Article Inspection (See 4.3).
- b. Quality Conformance Inspection (See 4.4).

4.3 First article inspection.

4.3.1 Submission. The contractor shall submit a first article sample as designated by the Contracting Officer for evaluation in accordance with provisions of 4.3.2. The first article sample shall consist of the items in sample quantities as indicated.

4.3.2 Inspections to be performed. First Article materiel shall be tested in accordance with Table I. Any test samples may be subjected, by the Government, to any or all of the examinations and tests specified herein, in the contract or on the applicable drawings.

4.3.3 Rejection. If any component or assembly fails to comply with the requirements, the First Article sample shall be rejected. The Government reserves the right to terminate its inspection upon the failure of an item of materiel to comply with any of the stated requirements. In the event of rejection, the Government reserves the right to require the contractor to take corrective action and submit a new First Article quantity.

TABLE I. First article inspection
CLASSIFICATION OF CHARACTERISTICS

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| PARAGRAPH | TITLE | EXAMINATION OR TEST | CONFORMANCE CRITERIA | SHEET OF | | INSPECTION METHOD REFERENCE |
|----------------|---|---------------------|----------------------|----------|--------|---|
| | | | | | | |
| | Container Assembly | | | | | DRAWING NUMBER 1.2576143 NEXT HIGHER ASSEMBLY |
| CLASSIFICATION | | | | | | |
| | <u>Temperature</u> | 1/ | 7 | | 3.3 | 4.6.1 |
| | <u>Performance</u> | 1/ | 7 | | 3.4 | 4.6.2 |
| | <u>Airtightness</u> | 1/ | 7 | | 3.5 | 4.6.3 |
| | <u>Pre-treatment - 3 standard panels per TT-C-490</u> | 1/ | 7 | | 3.7.1 | 4.6.4 |
| | <u>Paint adhesion</u> | 1/ | 7 | | 3.7.2 | 4.6.5 |
| | <u>Corrosion resistance</u> | 1/ | 7 | | 3.7.3 | 4.6.6 |
| | <u>Gasket compression</u> | 1/ | 7 | | 3.8 | 4.6.7 |
| | <u>Weld security</u> | 1/ | 7 | | 3.9 | 4.6.8 |
| | Hasp | 1/ | 7 | | 3.9.1 | |
| | Handle | 1/ | 7 | | 3.9.2 | |
| | Latch | 1/ | 7 | | 3.9.3 | |
| | <u>Concavity and convexity</u> | 1/ | 7 | | 3.10 | 4.6.9 |
| | <u>Cover assembly</u> | 1/ | 7 | | 3.10.1 | |
| | Body assembly | 1/ | 7 | | 3.10.2 | |
| NOTES | 1/ Accept on zero defects, reject on one defect. | | | | | |

Replaces 1570, 1 Feb 85, which may not be used

AMSMC Form 1570b, 1 Jul 89

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4.4 Quality conformance inspection.

4.4.1 Inspection lot formation. The term "inspection lot" is defined as a homogeneous collection of units of product from which a representative sample is drawn or which is inspected 100 percent to determine conformance with applicable requirements. Units of product selected for inspection shall represent only the inspection lot from which they are drawn and shall not be construed to represent any prior or subsequent quantities presented for inspection. Homogeneity shall be considered to exist provided the inspection lot has been produced by one manufacturer, in one unchanged process, using the same materials and methods, in accordance with the same drawings, same drawing revisions, same specifications and same specification revisions and complies with the provisions for submission of product. All material submitted for inspection in accordance with this specification shall comply with the homogeneity criteria specified herein, regardless of the type of inspection procedure which is being applied to determine conformance with requirements.

4.4.1.1 Lot identification. The cover and body assemblies of each container of the lot shall be identified as specified by Dwgs 12576152 and 12576144 supplemented as directed by the procuring activity.

4.4.2 Examinations and tests.

a. Classification of characteristics. Quality conformance examinations and tests are specified in the following Classification of Characteristics paragraphs. The contractor's quality program or detailed inspection system shall provide assurance of compliance of all characteristics with the applicable drawing and specification requirements utilizing as a minimum the conformance criteria specified. When cited herein, attributes sampling inspection shall be conducted in accordance with Table II using the inspection levels stated in the Classification of Characteristics paragraphs.

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TABLE II. Attributes sampling inspection

| <u>Lot Size</u> | <u>Inspection Levels</u> | | | | | |
|------------------|--------------------------|-----------|------------|-----------|----------|-----------|
| | <u>I</u> | <u>II</u> | <u>III</u> | <u>IV</u> | <u>V</u> | <u>VI</u> |
| 2 to 8 | * | * | * | * | 5 | 3 |
| 9 to 15 | * | * | * | 13 | 5 | 3 |
| 16 to 25 | * | * | * | 13 | 5 | 3 |
| 26 to 50 | * | * | 32 | 13 | 5 | 3 |
| 51 to 90 | * | * | 32 | 13 | 13 | 5 |
| 91 to 150 | * | 125 | 32 | 13 | 13 | 5 |
| 151 to 280 | * | 125 | 32 | 32 | 20 | 8 |
| 281 to 500 | * | 125 | 32 | 32 | 20 | 8 |
| 501 to 1200 | * | 125 | 80 | 50 | 20 | 13 |
| 1201 to 3200 | 1250 | 125 | 80 | 50 | 32 | 13 |
| 3201 to 10000 | 1250 | 125 | 125 | 50 | 32 | 13 |
| 10001 to 35000 | 1250 | 315 | 125 | 80 | 50 | 13 |
| 35001 to 150000 | 1250 | 315 | 125 | 80 | 50 | 13 |
| 150000 to 500000 | 1250 | 500 | 200 | 125 | 50 | 13 |
| 500001 and over | 1250 | 500 | 200 | 125 | 50 | 13 |

Numbers under inspection levels indicate sample size; asterisks (*) indicate one hundred percent inspection. If sample size exceeds lot size, perform one hundred percent inspection. Accept on zero and reject on one or more for all inspection levels.

b. Alternative quality conformance. Alternative quality conformance procedures, methods, or equipment, such as statistical process control, tool control, other types of sampling procedures, etc., may be used by the contractor when they provide, as a minimum, the level of quality assurance required by the provisions specified herein. Prior to applying such alternative procedures, methods, or equipment, the contractor shall describe them in a written proposal submitted to the Government for evaluating (see 6.9). When required, the contractor shall demonstrate that the effectiveness of each proposed alternative is equal to or better than the specified quality assurance provision(s) herein. In cases of dispute as to whether the contractor's proposed alternative(s) provides equivalent assurance, the provisions of this specification shall apply. All approved alternative provisions shall be specifically incorporated into the contractor's quality program plan or detailed inspection system, as applicable.

QUALITY CONFORMANCE INSPECTION
CLASSIFICATION OF CHARACTERISTICS

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| PARAGRAPH | TITLE | SHEET 1 OF 1 | | INSPECTION METHOD REFERENCE |
|-----------------|---|---------------------|----------------------|-----------------------------|
| | | EXAMINATION OR TEST | CONFORMANCE CRITERIA | |
| 4.4.2.1 | PA125 Ammunition Container Assembly | | | |
| CLASSIFICATION | | | | |
| <u>Critical</u> | None defined. | | | |
| <u>Major</u> | | | | |
| 101. | Performance | 2/ | Level III | 3.4 4.6.2 |
| 102. | Airtightness | 2/ | Level III | 3.5 4.6.3 |
| 103. | Pretreatment | 1/ 2/ | Level III | 3.7.1 4.6.4 |
| 104. | Paint adhesion | 2/ | Level III | 3.7.2 4.6.5 |
| 105. | Gasket compression | 2/ | Level III | 3.8 4.6.7 |
| 106. | Concavity and convexity | 2/ | Level III | 3.10 4.6.9 |
| 107. | Elevated temperature (storage) | 2/ | Level III | 3.3 4.6.1 |
| 108. | Weld security | 2/ | Level III | 3.9 4.6.8 |
| 109. | Corrosion resistance | 2/ | Level III | 3.7.3 4.6.6 |
| <u>Minor</u> | None defined. | | | |
| NOTES: | 1/ 3 Standard panels per TT-C-490 2/ Accept on zero defects, reject on one defect. | | | |

AMSMC Form 1570a, 1 Jul 89

Replaces AMSMC Form 1570a, 1 Apr 85, which may not be used.

QUALITY CONFORMANCE INSPECTION
CLASSIFICATION OF CHARACTERISTICS

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| PARAGRAPH | TITLE | SHEET 1 OF 1 | | DRAWING NUMBER |
|---|---|----------------------|-----------------------|-----------------------------|
| 4.4.2.2 | Body Assembly | | | 12576144 |
| | | | | NEXT HIGHER ASSEMBLY |
| CLASSIFICATION | EXAMINATION OR TEST | CONFORMANCE CRITERIA | REQUIREMENT PARAGRAPH | INSPECTION METHOD REFERENCE |
| <u>Critical</u> | None Defined | | | |
| <u>Major</u> | Inside width, body assembly, min | Level II | 3.2 | Gage |
| 101 | Inside length, body assembly, min | Level II | 3.2 | Gage |
| 102 | Inside depth, body assembly, min | Level II | 3.2 | Gage |
| 103 | Convexity or concavity top edges of body | Level II | 3.10.2 | Gage |
| 104 | Interior or exterior paint missing or nonconforming | Level II | 3.7.1 | Visual 1/ |
| 105 | Corrosion | Level II | 3.7.2 | Visual |
| <u>Minor</u> | | | | |
| 201 | Poor workmanship | Level IV | 3.12 | Visual |
| <p>NOTES: 1/ MIL-STD-406 shall be used as a guide to classify paint defects. In the standard, defects classified as incidental shall be considered permissible; defects classified as minor shall be considered major. Missing, damaged or incomplete paint shall be classified as a defect. Bare spots on any subassembly which do not accumulate to exceed 1/2 square inch in area or scratches which do not penetrate to the phosphate coating shall be disregarded.</p> | | | | |

AMSMC Form 1570a, 1 Jul 89

Replaces AMSMC Form 1570a, 1 Apr 85, which may not be used.

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| PARAGRAPH | TITLE | SHEET 1 OF 1 | | DRAWING NUMBER |
|---|--|----------------------|-----------------------|----------------------------------|
| | | CONFORMANCE CRITERIA | REQUIREMENT PARAGRAPH | |
| 4.4.2.3 | Cover Assembly | | | 12576152 NEXT HIGHER ASSEMBLY |
| <u>CLASSIFICATION</u> | <u>EXAMINATION OR TEST</u> | | | |
| <u>Critical</u> | None Defined | | | |
| <u>Major</u> | | | | |
| 101 | Width, inside cover (2 places) | Level II | 3.2 | Gage |
| 102 | Interior or exterior paint missing or nonconforming | Level II | 3.7.2 | Visual 1/ |
| 103 | Corrosion | Level II | 3.7.3 | Visual |
| 104 | Missing, inverted, loose, misaligned or defective gasket | Level II | 3.4.1 | Visual -Manual 2/ |
| <u>Minor</u> | | | | |
| 201 | Poor workmanship | Level IV | 3.12 | Visual |
| <p><u>NOTES:</u> 1/ MIL-STD-406 shall be used as a guide to classify paint defects. In the standard, defects classified as incidental shall be considered permissible; defects classified as minor shall be considered major. Missing, damaged or incomplete paint shall be classified as a defect. Bare spots on any subassembly which do not accumulate to exceed 1/2 square inch in area or scratches which do not penetrate to the phosphate coating shall be disregarded. 2/ If the gasket is missing, inverted, broken, split or torn, contains a gross defect in texture, fit or can be shifted horizontally with the gasket retainer by finger pressure or manual shake off the cover assembly, the sample unit shall be classified as defective.</p> | | | | |

AMSMC Form 1570a, 1 Jul 89

Replaces AMSMC Form 1570a, 1 Apr 85, which may not be used.

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| PARAGRAPH | TITLE | SHEET 1 OF 1 | | DRAWING NUMBER |
|---|---|----------------------|-----------------------|-----------------------------|
| 4.4.2.4 | Container Assembly | | | 12576143 |
| | | | | NEXT HIGHER ASSEMBLY |
| CLASSIFICATION | EXAMINATION OR TEST | CONFORMANCE CRITERIA | REQUIREMENT PARAGRAPH | INSPECTION METHOD REFERENCE |
| <u>Critical</u> | None Defined | | | |
| <u>Major</u> | | | | |
| 101 | Cracked or split component | Level II | 3.12 | Visual |
| 102 | Missing, incomplete, improper assembly of component | Level II | 3.12 | Visual |
| 103 | Missing, incomplete or improper welds | Level II | 3.12 | Visual |
| 104 | Mutilated metal component | Level II | 3.12 | Visual 1/ |
| 105 | Steel sliver, burr or sharp edge | Level II | 3.12 | Visual - Manual 2/ |
| <u>Minor</u> | | | | |
| 201 | Outside height | Level IV | 3.2 | Gage |
| 202 | Outside length | Level IV | 3.2 | Gage |
| 203 | Outside width | Level IV | 3.2 | Gage |
| 204 | Marking incorrect, incomplete, illegible or missing | Level IV | 3.2 | Visual |
| 205 | Foreign matter, except corrosion | Level IV | 3.12 | Visual |
| 206 | Poor workmanship | Level IV | 3.12 | Visual |
| <p>NOTES: 1/ If the body or cover is severely dented or malformed, or the closing or locking hardware is bent or otherwise distorted to cause functional failure or become a personnel hazard, the sample unit shall be classified defective.</p> <p>2/ If a steel sliver, burr or sharp edge which could injure unprotected hands is found on a ferrule, the bottom edge of a latch or cover skirt, or on the top or bottom edges of the body, the sample unit shall be classified defective</p> | | | | |

Replaces AMSMC Form 1570a, 1 Apr 85, which may not be used.

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4.4.3 Testing. The tests listed shall be performed on each lot in compliance with the test methods and procedures specified by 4.6. For acceptance, the results of each test shall apply with the applicable requirements.

4.4.3.1 Performance. Failure of two or more units of the sample to comply with the specified performance requirements shall be cause for rejection of the lot. If one unit fails to comply with the requirements, a second sample consisting of the same number as specified for the first sample, shall be tested. If in the accumulated samples, two or more units fail to comply with the requirements for performance, the lot shall be rejected.

4.4.3.2 Airtightness. Failure of four or more units of the sample to comply with the requirement for airtightness shall be cause for rejection of the lot. If two or three units of the sample fail to comply with the requirements, a second sample consisting of the same number of units as specified for the first sample shall be tested. If in the accumulated samples, five or more units fail to comply with the requirement, the lot shall be rejected. A stream or recurring succession of bubbles from any surface, seam, or gasket junction shall be evidence of a defective container.

4.4.3.3 Phosphate coating. Failure of the phosphate coating on the standard panels to comply with the applicable requirements for appearance and minimum weight, shall be cause for rejection of all container subassemblies phosphated since the preceding test.

4.4.3.4 Paint adhesion. Failure of any unit of the sample to comply with the requirements for paint adhesion shall be cause for rejection of the lot.

4.4.3.5 Corrosion resistance. Failure of any unit of the sample to comply with the requirements for corrosion resistance shall be cause for rejection of the lot.

4.4.3.6 Variable inspection plan. A variables inspection plan from MIL-STD-414, Table B-3 shall be used to determine lot acceptability, applying the method of calculation as shown in Example B-3. Failure of the sample to meet the acceptability criterion shall be cause for rejection of the lot.

4.4.3.7 Weld security. Failure of any unit of the sample to comply with the specified requirements for weld security of hasp assemblies, latch assemblies or handle assemblies shall be cause for rejection of the lot.

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4.4.3.8 Convexity or concavity. Failure of four or more units of the sample to comply with the requirements for convexity or concavity shall be cause for rejection of the lot. If two or three units of the sample fail to comply with the requirement, a second sample consisting of the same number of units as specified for the first sample shall be tested. If in the accumulated samples, five or more units fail to comply with the requirement the lot shall be rejected. The sampling plan shall apply independently to cover and body assemblies.

4.4.4 Packaging, packing and marking inspection. There are no packaging or packing requirements applicable to this item.

4.4.5 Classification of defects. The classification of defects shall be as follows:

4.5 Inspection equipment.

4.5.1 Contractor-furnished inspection equipment.

4.5.1.1 Government design. Unless otherwise specified in the contract, all inspection equipment identified by drawing number in specifications forming a part of the contract shall be supplied by the contractor in accordance with the design specified. The contractor may, however, propose alternatives to Government designs for approval in accordance with 6.3.

4.5.1.2 Contractor design. The contractor shall design and supply inspection equipment compatible with the "Methods of Inspection" specified in 4.6 of this specification and with the component inspection procedures specified in the paragraph 3.8 requirements of MIL-W-63150 whenever Government designs are not specified (see 4.6.1.1). Construction shall be such as to facilitate routine calibration of test equipment. Contractor inspection equipment designs shall be submitted for approval in accordance with 6.3.

4.6 Methods of inspection.

4.6.1 Elevated temperature storage. The container shall meet the requirements of 4.6.2 prior to testing. Environmentally condition the container as specified in 3.3.1. After conditioning reinspect the container in accordance with 4.6.2 for compliance to the requirements.

4.6.2 Performance. The container shall be inspected to assure compliance with the requirements of 3.4 through the following procedure.

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a. Unlock and lock the cover assembly hardware by hand leverage. Note the locking and unlocking action for effectiveness and ease of operation.

b. Remove and replace the cover assembly. Note any misfit or bind with body assembly.

c. Remove all cover assemblies. Inspect the gasket for fit, security, cuts and splits.

d. Note any sticking of gaskets to the top edges of the body assemblies.

e. Engage each of the handles by hand and release. Handle shall return to within mounting hardware. No Binding or misalignment shall occur.

4.6.3 Airtightness. The container shall be conditioned to a minimum temperature of 50°F and ambient pressure prior to testing. The containers shall be tested in accordance with 4.6.3.1 or with permission of the procurement agency with 4.6.3.2, to the requirements of 3.5. A wetting agent may be used to minimize air bubbles clinging to the exterior surface.

4.6.3.1 Vacuum method. The container shall be tested for leakage by immersing the closed container in the inverted position under water in a vacuum vessel and lowering the pressure in the vessel to three pounds per square inch minimum below ambient pressure. Observation for leakage of air from the container interior shall be made for a minimum of 30 seconds after reduction of pressure. A stream or recurring succession of bubbles shall constitute leakage.

4.6.3.2 Hot water method. The container shall be tested for leakage by immersing the closed container, in the inverted position, to a depth of one inch below the surface of the water. The temperature of the water and the length of time of immersion shall be that which will assure an increase in pressure to a minimum of 3 psi above ambient pressure. Observation for air leakage from the container interior shall be made during the period of pressure build-up and for 30 seconds after the 3 psi pressure differential has been reached.

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4.6.4 Pretreatment. The method of test shall be as specified in TT-C-490, as applicable to the type of phosphate used. The prescribed panels shall be processed with cover or body assemblies to be represented, beginning with the start of daily production and at 4 hour intervals, maximum, thereafter. Appearance and weight of the phosphate coating on the panels shall be recorded against the batch of cover or body assemblies represented.

4.6.5 Paint adhesion. The method of test shall be as specified in TT-C-490. The test shall be performed on three randomly selected surfaces of each unit of the sample.

4.6.6 Corrosion resistance. The test method shall be as specified in ASTM B117 Method of Test for Salt Spray (Fog) Testing. Using a sharp instrument, an "X" 6 to 7 inches long shall be scored on a flat surface of the cover and one side of the body of each sample container. The samples shall be supported, one with the scored "X" in the upright position for the cover test and the other sample supported with the scored "X" in the upright position for the body side test. Traces of paint blistering or corrosion spots on component edges or corners shall not be classed as protective coating failure.

4.6.7 Gasket compression. The method of test shall be specified to determine compliance to the requirement of 3.8 (see 6.8).

4.6.8 Weld security. The container and its subassemblies shall be tested to the requirements of 3.9.

4.6.8.1 Hasp assembly. The sample body assembly resting on its bottom shall be clamped in a suitable device. The specified tensional force shall be slowly applied perpendicular to the bottom and against the underside of the offset of the hasp. The force shall be applied at a rate of .125 to .25 inch per minute and held for one minute. After removal of the force, examine the hasp for distortion and weld failure.

4.6.8.2 Handle assembly. With sample body assembly resting on its bottom or on end, attach a suitable device to each end handle. With one held, apply the specified tensional force through the other parallel to the container bottom against the ferrule of each handle. The force shall be applied at a rate of .125 to .25 inch per minute and held for one minute. After removal of the force, examine the handle and hasp for distortion and weld failure.

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4.6.8.3 Latch assembly. Attach a suitable device to each latch on the cover assembly. Secure one and slowly apply a tensional force to the other parallel to the face of the cover. The force shall be applied at a rate of .125 to .25 inch per minute and held for one minute. Apply the force against the surface of the latch links exposed on the underside of each latch. After removal of the force, examine the latches, latch links, latch link retainers and cover for distortion and weld failure.

4.6.9 Concavity and convexity. The container and its subassemblies shall be tested to the requirements of 3.10.

4.6.9.1 Cover assembly. The concavity and convexity shall be measured on the sample cover assemblies along the length of the cover in the area above the cover gasket and the width adjacent to latch link retainer on the flat surface of the cover.

4.6.9.2 Body assembly. The concavity and convexity shall be measured on the sample bodies along the length and width of the top edge.

5. PACKAGING

5.1 Preservation, packaging, packing, marking and unitization. Preservation, packaging, packing, marking and unitization shall conform to standard commercial practices and meet common carrier acceptance and provide safe delivery to destination at lowest rates.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The containers described herein are to be used for holding of ammunition during usage, shipping and storage.

6.2 Acquisition requirements. Acquisition documents should specify the following:

- a. Title, number and date of this specification.
- b. Place of inspection, if not place of manufacture.
- c. Issue of DoDISS to be cited in the solicitation and if required, the specific issue of individual documents referenced (see 2.1.1 and 2.2).

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- d. When first article is required (see 3.11).
- e. Provisions for the submission and approval of the welding procedure.
- f. Requirements for quality conformance inspection sampling plan.

6.3 Submission of contractor inspection equipment designs for approval. Submit two copies of designs as required to: Commander, U.S. Army AMCCOM, ATTN: SMCAR-QAF-I (D), Picatinny Arsenal, NJ 07806-5000. This address will be specified on the Contract Data Requirements List, DD Form 1423, in the contract.

6.4 First article. When first article inspection is required, the contracting officer should provide specific guidance to offerors whether the item(s) should be a first article sample, a first production item, or a standard production item from the contractor's current inventory and the number of items to be tested as specified in 4.3. The contracting officer should include specific instructions in acquisition documents regarding arrangements for examinations, approval of first article test results and disposition of first articles. Invitations for bids should be provided that the Government reserves the right to waive the requirement for samples for first article inspection to those bidders offering a product which has been previously acquired or tested by the Government, and that bidders offering such product, who wish to rely on such production or test, must furnish evidence with the bid that prior Government approval is presently appropriate for the pending contract.

6.5 Drawings. Drawings listed in Section 2 of this specification under the heading U.S. Army Armament, Research, Development and Engineering Center (ARDEC), may also include drawings prepared by, and identified as U.S. Army Armament, Research and Development Command (ARRADCOM), Edgewood Arsenal, Frankford Arsenal, Rock Island Arsenal, or Picatinny Arsenal drawings. Technical data originally prepared by these activities is now under the cognizance of ARDEC.

6.6 Intermediate point inspection. The classification of defects identifies the defect characteristics (among other things) for acceptance inspection. It may be necessary to modify the sequence of inspection stations to best suit the manufacturing process. Inspection for characteristics which will be hidden or altered by subsequent processing operations (including unrelated operations) should be scheduled to prevent premature acceptance or rejection, which could be detrimental to the attainment of optimum product quality in the end item.

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6.7 Measurement for gasket compression. Three point contact of the container resting on blocks may be used to overcome any rocking motion which might be encountered with the container resting on the surface plate. However, since the measurement technique relies upon relative distances, care should be taken to assure that there is no displacement on the referenced surfaces between the reading.

6.8 Subject term (keyword) listing.

Cover assembly
Body assembly
Hasp and latch
Gasket compression
Concavity and convexity
Pretreatment
Phosphate
Paint

6.9 Submission of alternative inspection provisions. Unless otherwise specified in the contract, proposed alternative quality conformance provisions will be submitted by the contractor for evaluation by the technical activity responsible for the preparation of this specification.

Custodian:
Army-AR

Preparing activity:
Army-AR

(Project 8140-A819)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

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| RECOMMEND A CHANGE: | | 1 DOCUMENT NUMBER MIL-C-70998 (AR) | 2 DOCUMENT DATE (YYMMDD) 18 FEBRUARY 1992 |
| 3 DOCUMENT TITLE CONTAINER, SHIPPING AND STORAGE, CARTRIDGE, 25MM, PA125 GENERAL SPECIFICATION FOR | | | |
| 4 NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets if needed.) | | | |
| 5 REASON FOR RECOMMENDATION | | | |
| 6 SUBMITTER | | | |
| a NAME (Last, First, Middle Initial) | | b ORGANIZATION | |
| c ADDRESS (Include Zip Code) | | d TELEPHONE (Include Area Code) (1) Commercial (2) AUTOVON (if applicable) | 7 DATE SUBMITTED (YYMMDD) |
| 8 PREPARING ACTIVITY | | | |
| a NAME US ARMY ARDEC STANDARDIZATION OFFICE | | b TELEPHONE (Include Area Code) (1) Commercial (2) AUTOVON (201) 724-6671 880-6671 | |
| c ADDRESS (Include Zip Code) ATTN. SMCAR-BAC-S PICATINNY ARSENAL, NJ 07806-5000 | | IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340 AUTOVON 289-2340 | |