1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers woven-wire-cloth sieves, and round-hole and square-hole, perforated-plate sieves intended for general use in the classification of materials according to size (mechanical analysis, fineness, and particle size determinations).

1.2 Classification.

* 1.2.1 Types and classes. The sieves shall be of the following types and classes, as specified (see 6.2).

Type I - Woven-wire-cloth sieves.
Type II - Perforated-plate sieves.
Class 3 - Round-hole.
Class 4 - Square-hole.

* 1.2.2 Sizes. The sieves shall be furnished in the cloth or plate sizes shown in American Society for Testing and Materials (ASTM) Standards E-11 and E-323, as specified (see 6.2).

* 1.2.3 Frame style. Sieves covered by this specification shall be furnished in the following frame styles, as specified (see 6.2).

Style A - Full height, standard 8-inch diameter frame
(2-inch depth to cloth or plate.)
Style B - Half height, standard 8-inch diameter frame (1-inch depth to cloth or plate.)

Style C - Diameter and height, as specified (see 6.2).

2. APPLICABLE DOCUMENTS

* 2.1 The following documents of the issue in effect on date of invitation for bids or request for proposal form a part of this specification to the extent specified herein.

Federal Specification:

PPP-B-636 - Boxes, Shipping, Fiberboard

Federal Standard:

Fed. Std. No. 123 - Marking for Domestic Shipment (Civil Agencies)

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards, at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

(Single copies of this specification and other Federal specifications required by activities outside the Federal Government for bidding purposes are available, without charge, from Business Service Centers at the General Services Administration Regional Offices in Boston, New York, Washington, DC, Atlanta, Chicago, Kansas City, MO, Fort Worth, Denver, San Francisco, Los Angeles, and Seattle, WA.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks, and the Index of Federal Specifications and Standards, from established distribution points in their agencies.)

Military Specification:

MIL-P-116 - Preservation, Methods of

Military Standards:

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-109 - Quality Assurance Terms and Definitions
MIL-STD-129 - Marking for Shipment and Storage
MIL-STD-130 - Identification Marking of U.S. Military Property

(Copies of Military Specifications and Standards, required by suppliers in connection with specific procurement functions, should be obtained from the procuring activity or as directed by the contracting officer.)

* 2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless a specific issue is identified, the issue in effect on date of invitation for bids or request for proposal shall apply.

American Society for Testing and Materials (ASTM)
E-11 Wire-Cloth Sieves for Testing Purposes
E-323 Perforated Plate Sieves for Testing Purposes

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

National Motor Freight Traffic Association, Inc., Agent
National Motor Freight Classification

(Application for copies should be addressed to American Trucking Associations, Inc., Attn: Tariff Order Section, 1616 P Street, N.W., Washington, DC 20036.)

Uniform Classification Committee, Agent
Uniform Freight Classification

(Application for copies should be addressed to the Uniform Classification Committee, Agent, Room 1106, 222 S. Riverside Plaza, Chicago, IL 60606.)

Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.

3. REQUIREMENTS

* 3.1 Standards compliance. Except as otherwise specified herein, sieves furnished under this specification shall conform to the requirements of ASTM E-11 and E-323, as applicable.
3.2 **Standard product.** The sieve shall, as a minimum, be in accordance with the requirements of this specification and shall be the manufacturer's standard product. Additional features which are not specifically prohibited by this specification but which are a part of the manufacturer's standard product shall be included in the sieve being furnished.

3.3 **First article.** When specified (see 6.2), the contractor shall furnish a sieve for first article inspection and approval (see 4.2.1 and 6.3).

3.4 **Material.** Except as otherwise specified, the material shall conform to the requirements of ASTM E-11 and ASTM E-323, as applicable.

3.5 **Interchangeability.** All removable units and replacement parts of similar equipment shall be interchangeable with corresponding items or parts and shall not require hand or machine fitting.

3.6 **Identification marking.** Equipment assemblies and parts shall be marked for identification in accordance with MIL-STD-130. In addition, sieves, including covers and pans (see 3.7.2), shall bear ASTM designations specified in ASTM E-11 and E-323, as applicable. The approved item name shall be Sieve, Test.

3.6.1 **Identification of sizes.** Sieves 1.00 millimeter (mm) and coarser shall be designated in millimeters and inches. Sieves finer than 1.00 mm shall be designated in microns and inches.

3.7 **Sieve parameters.** Sieve parameters shall conform to the following, as applicable:

- b. Type II - Perforated-plate sieves, ASTM E-323.
- d. Class 4 - Square-hole, ASTM E-323.

3.7.1 **Frames.** Frames for sieves shall conform to the requirements of ASTM E-11 and ASTM E-323, as applicable.
3.7.2 Covers and pans. Covers and pans shall be furnished, unless otherwise specified (see 6.2), and shall conform to the requirements of ASTM E-11 and ASTM E-323, as applicable.

3.8 Workmanship. The quality of workmanship shall be such as to produce sieves that are in accordance with the requirements of this specification and are so constructed as to ensure the proper functioning of all parts of the unit.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the supplier may use 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 assure that supplies and services conform to prescribed requirements.

4.1.1 Inspection of materials and components. In accordance with 4.1, the supplier is responsible for insuring that materials and components used were manufactured, examined, and tested to the extent specified, in accordance with the requirements of referenced subsidiary specifications and standards. The terms and definitions of MIL-STD-109 shall apply.

4.2 Classification of inspections. The inspection requirements, specified herein, are classified as follows:

a. First article inspection (see 4.2.1).
b. Quality conformance inspection (see 4.2.2).

4.2.1 First article inspection. First article inspection shall be performed on one sieve when a first article sample is required (see 3.3). This inspection shall include the examination of 4.5 and the tests of 4.6. Failure of the first article to pass the examination or any of the tests shall be cause for rejection. The first article may be a standard production item from the supplier's current inventory, provided the unit meets the requirements of the specification and is representative of the design, construction, and manufacturing technique applicable to the remaining units to be furnished under the contract.
4.2.2 Quality conformance inspection. Quality conformance inspection shall be performed on the sample sieves selected in accordance with 4.4. This inspection shall include the examination of 4.5 and the tests of 4.6.

4.3 Inspection lot. All units of the same size, type, and class offered to the Government at one time shall be considered a lot for purposes of inspection. The sample unit shall be one complete sieve.

4.4 Sampling.

4.4.1 Sampling for examination. A random sample of sieves shall be selected from each lot offered to the Government in accordance with MIL-STD-105 at inspection level II. The acceptable quality level shall be 4.0 percent.

4.4.2 Sampling for tests. A random sample of sieves shall be selected from each lot offered to the Government in accordance with MIL-STD-105 at inspection level S-4. The acceptable quality level shall be 6.0 percent.

4.5 Examination. Each unit selected in accordance with 4.4.1 shall be examined to verify compliance with the requirements of this specification. This element of inspection shall encompass all visual examinations and dimensional requirements of ASTM E-11 and ASTM E-323, as applicable.

4.6 Tests. Each unit selected in accordance with 4.4.2 shall be tested and any unit failing to pass the tests specified in ASTM E-11 and ASTM E-323, as applicable, shall be rejected. A certificate of compliance from an independent laboratory, approved by the contracting officer, will be accepted as evidence that the unit has passed the required tests.

4.7 Inspection of preparation for delivery. An inspection shall be made to determine whether the preservation, packaging, packing, and marking comply with the requirements in section 5 of this specification. Defects shall be scored in accordance with Table I. For examination of interior packaging the sample unit shall be one shipping container fully prepared for delivery, selected at random just prior to the closing operation. Sampling shall be in accordance with MIL-STD-105. Defects of closure listed shall be examined on shipping containers fully prepared for delivery. The lot size shall be the number of shipping containers in the end item inspection lot. The inspection level shall be S-2 with an AQL of 4.0 defects per hundred units.
Table I. Classification of preparation for delivery defects

<table>
<thead>
<tr>
<th>Examine</th>
<th>Defects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Markings</td>
<td>Omitted; incorrect; illegible; improper size, location, sequence, or method of application</td>
</tr>
<tr>
<td>Material</td>
<td>Any component missing or damaged</td>
</tr>
<tr>
<td>Workmanship</td>
<td>Inadequate application of components, such as incomplete closure of container flaps, loose strapping, inadequate stapling, or distortion of container</td>
</tr>
<tr>
<td>Contents</td>
<td>Gross weight exceeds requirements of the box specification</td>
</tr>
</tbody>
</table>

5. PREPARATION FOR DELIVERY

* 5.1 Packaging. Packaging shall be level A or C, as specified (see 6.2).

  5.1.1 Level A. Each sieve shall be packaged in accordance with method 1C-2, MIL-P-116.

* 5.1.2 Level C. Sieves shall be packaged to insure protection during shipment and safe delivery to destination. The supplier may use his standard practice when it meets these requirements.

* 5.2 Packing. Packing shall be level A, B, or C, as specified (see 6.2).

* 5.2.1 Level A. Sieves of the same classification, packaged as specified in 5.1, shall be packed in a close-fitting box conforming to PPP-B-636, class weather-resistant, grade V2s. Each box shall be closed, sealed with waterproof tape, and reinforced with bands of filament tape, in accordance with the appendix to PPP-B-636.

* 5.2.2 Level B. Sieves of the same classification, packaged as specified in 5.1, shall be packed in a close-fitting box conforming to PPP-B-636, class domestic. Each shipping container shall be closed in accordance with method II of the appendix to PPP-B-636.
5.2.2.1 Level B shipments. When specified (see 6.2), fiberboard boxes conforming to PPP-B-636, class weather-resistant, grade V3c, shall be used for level B shipments.

5.2.3 Level C. The sieves shall be packed in a manner which will insure arrival at destination in satisfactory condition and will be acceptable to the carrier at lowest rates. Containers and packing shall comply with Uniform Freight Classification rules or National Motor Freight Classification rules.

5.3 Marking. In addition to any special markings required by the contract or order, all marking shall be in accordance with 5.3.1 or 5.3.2, as specified (see 6.2).

5.3.1 Civil agencies. Marking shall be in accordance with Fed. Std. No. 123.

5.3.2 Military agencies. Marking shall be in accordance with MIL-STD-129.

6. NOTES

6.1 Intended use. Sieves shall be used as a screening medium of woven-wire-cloth or perforated-plate, for general use in the classification of materials according to size (mechanical analysis, fineness, and particle size determinations).

6.2 Ordering data. Purchasers should select the preferred options offered herein and include the following data in procurement documents.

6.2.1 Procurement requirements.

(a) Title, number, and date of this specification.
(b) Type and class of sieves required (see 1.2.1).
(c) Size of cloth or plate required (see 1.2.2).
(d) Style of sieve frame required and, if style C, diameter and height (see 1.2.3).
(e) If covers or pans are not required (see 3.7.2).
(f) When first article is required for inspection and approval (see 3.3, 4.2.1, and 6.3).
(g) Level of packaging and level of packing required (see 5.1, 5.2, and 5.2.2.1).
(h) Marking required (see 5.3).
6.2.2 Contract data requirements. When this specification is used in a procurement which incorporates a DD Form 1423 and invokes the provisions of paragraph 7-104.9(n) of the Armed Services Procurement Regulation, the data requirements identified below will be developed as specified by an approved Data Item Description (DD Form 1664) and delivered in accordance with the Contract Data Requirements List (DD Form 1423) incorporated into the contract. When the provisions of ASPR 7-104.9(n) are not invoked, the data specified below shall be delivered in accordance with the contract requirements. Deliverable data required by this specification is cited in the following paragraph.

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Data Requirement</th>
<th>Applicable DD 1664</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.6</td>
<td>Certificate of Compliance</td>
<td>UDI-E-24007</td>
</tr>
</tbody>
</table>

(Copies of Data Item Descriptions required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

6.3 First article. When a first article is required, it shall be tested and approved under the appropriate provisions of paragraph 7-104.55 of the Armed Services Procurement Regulation. The first article may be a standard production item from the manufacturer's current inventory. The first article should consist of one unit. The contracting officer should include specific instructions in all procurement instruments, regarding arrangements for examinations, tests, and approval of the first article.

6.4 Revision changes. The margin of this specification is marked with asterisks to indicate where changes (addition, modifications, corrections, deletions) from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

MILITARY CUSTODIANS:
- Army - GL
- Navy - YD

Preparing activity:
- Navy - YD

Civil Agency Coordinating Activities:
- COM - NBS
- GSA - FSS

User activities:
- Army - MU, SM, ME
- Navy - MC, SH

Orders for this publication are to be placed with the General Services Administration, acting as an agent for the Superintendent of Documents. See section 2 of this specification to obtain extra copies and other documents referenced herein.

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