

MIL-P-50959(MU)
3 September 1971

MILITARY SPECIFICATION

PLUG, MACHINE THREAD

1. SCOPE

1.1 This specification covers requirements, quality assurance provisions, and the preparation for delivery criteria for one type of plug, machine thread used on M500 Container for M422 projectile.

2. APPLICABLE DOCUMENTS

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

SPECIFICATIONS

MILITARY

MIL-P-116 - Preservation, Methods of

STANDARDS

MILITARY

MIL-STD-105 - Sampling Procedures and Table for
Inspection by Attributes.

MIL-STD-1169 (MU) - Packaging, Packing and Marking
for Shipments of Inert Ammunition
Components

DRAWINGS

ORDNANCE CORPS

8895698 - Plug, Machine Thread
8808362 - Packing and Marking for Storage
and Shipments
8883535 - Bag, Packing, for Repair Parts
EL-8795698 - Equipment List

FSC 1110

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

3. REQUIREMENTS

3.1 Materials. The contractor shall furnish objective evidence (see 6.2) that the material complies with the specifications listed on the applicable drawing.

3.2 Assembly. The plug shall comply with all requirements specified on the drawing (dwg) 8795698, with all requirements specified herein, and with the requirements of all applicable specifications to the extent specified on the drawing and herein.

3.3 Workmanship.

3.3.1 Plastic and metal characteristics. All components shall be free from cracks, splits, cold flow, shrinkage, cold shuts, inclusions, porosity, or any similar characteristic.

3.3.2 Threads. Threads shall be full and undamaged for the entire minimum length or depth as required on the applicable drawing.

3.3.3 Burrs. Parts shall be free from burrs.

3.3.4 Foreign matter. Parts shall be free from chips, dirt, grease, rust, corrosion, or any embedded foreign material.

3.3.5 Cleaning. The cleaning method shall not be injurious to any of the parts, nor shall the parts be contaminated by the cleaning agent.

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 supplies and services conform to prescribed requirements.

4.2 First article inspection. Not Applicable.

4.3 Quality Conformance Inspection.

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4.3.1 Inspection lot. A lot or batch and its formation, size, and presentation is described in MIL-STD-105, Section 5. Accordingly, a lot shall mean an inspection lot and a batch shall mean an inspection batch for the purpose of this specification. The manner in which each inspection lot or batch is to be presented and identified by the contractor, shall be designated or approved by the Government representative .

4.3.2 Product inspection examination. Critical characteristics shall require 100 percent inspection of all items in the inspection lot. A sample shall be selected at random from each inspection lot in accordance with the applicable major or minor characteristic table and inspected for all characteristics in the applicable classification. Any characteristics in the sample found to be defective shall reject the inspection lot. Sequence for the inspection of characteristics in each classification need not be followed as long as all characteristic inspections are performed.

Table I
Major Characteristics

| <u>Lot Size</u> | <u>Sample Size</u> | <u>Lot Size</u> | <u>Sample Size</u> | <u>Lot Size</u> | <u>Sample Size</u> | <u>Lot Size</u> | <u>Sample Size</u> |
|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|
| 1-16 | all | 28-29 | 23 | 52-56 | 31 | 132-156 | 39 |
| 17 | 16 | 30-31 | 24 | 57-62 | 32 | 157-191 | 40 |
| 18 | 17 | 32-34 | 25 | 63-69 | 33 | 192-244 | 41 |
| 19-20 | 18 | 35-36 | 26 | 70-76 | 34 | 245-334 | 42 |
| 21 | 19 | 37-40 | 27 | 77-86 | 35 | 335-519 | 43 |
| 22-23 | 20 | 41-43 | 28 | 87-97 | 36 | 520-1120 | 44 |
| 24-25 | 21 | 44-47 | 29 | 98-112 | 37 | over 1120 | 45 |
| 26-27 | 22 | 48-51 | 30 | 113-131 | 38 | | |

Table II
Minor Characteristics

| <u>Lot Size</u> | <u>Sample Size</u> | <u>Lot Size</u> | <u>Sample Size</u> | <u>Lot Size</u> | <u>Sample Size</u> | <u>Lot Size</u> | <u>Sample Size</u> |
|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|
| 1-9 | all | 14-16 | 12 | 28-33 | 16 | 77-121 | 20 |
| 10 | 9 | 17-18 | 13 | 34-41 | 17 | 122-273 | 21 |
| 11 | 10 | 19-22 | 14 | 42-54 | 18 | over 273 | 22 |
| 12-13 | 11 | 23-27 | 15 | 55-76 | 19 | | |

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4.3.2.1 Classification of characteristics (see 3.2).
Critical, major and minor characteristics are defined in MIL-STD-105. Inspection shall be conducted as follows:

4.3.2.1.1 Plug, machine thread (see dwg 8795698).

| <u>Categories</u> | <u>Characteristics</u> | <u>Method of Inspection</u> |
|-------------------|------------------------|-----------------------------|
|-------------------|------------------------|-----------------------------|

Critical: None defined.

Major:

| | | |
|------|---|---------|
| 101. | Depth of groove, min (.04) | Gage |
| 102. | Diameter of thread clearance, max (.42) | Gage |
| 103. | Radius of groove, min (.03) | Gage |
| 104. | Pitch diameter of thread | Gage |
| 105. | Major diameter of thread | Gage |
| 106. | Width of thread clearance, max (.05) | Gage |
| 107. | Length to underside of head (.189) | Gage |
| 108. | Material (see 3.1) | *Visual |

Minor:

| | | |
|------|--------------------------|---------------|
| 201. | Width of slot (.051) | Gage |
| 202. | Outside diameter (.7500) | Gage |
| 203. | Depth of slot (.09) | Gage |
| 204. | Length (.406) | Gage |
| 205. | Workmanship (see 3.3) | Visual/Manual |

4.3.2.1.2 Preparation for delivery (see 5.1).

| <u>Categories</u> | <u>Characteristics</u> | <u>Method of Inspection</u> |
|-------------------|------------------------|-----------------------------|
|-------------------|------------------------|-----------------------------|

Critical: None defined.

Major:

| | | |
|------|--|---------------|
| 101. | Preservation, packaging, packing and marking in accordance with MIL-STD-1169 | Visual/Manual |
|------|--|---------------|

Minor: None defined.

4.3.2.1.3 Bag, packing for repair parts (see dwg 8883535 covering dwg part number 8883535-2 and 5.2).

| <u>Categories</u> | <u>Characteristics</u> | <u>Method of Inspection</u> |
|-------------------|------------------------|-----------------------------|
|-------------------|------------------------|-----------------------------|

Critical: None defined.

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Major:

| | | |
|------|--|---------------|
| 101. | Material (see 3.1) | Visual |
| 102. | Length before packing, min | *Measure |
| 103. | Width before packing, min | *Measure |
| 104. | Proper heat seal. | Visual/Manual |
| 105. | Properly packed | Visual/Manual |
| 106. | No crack or hole in bag. | Visual |
| 107. | Objective evidence (see 6.2) for heat seal test in accordance with MIL-P-116 | Visual |

*Measure with suitable scale.

Minor:

| | | |
|------|---------------------------------|---------------|
| 201. | Marking | Visual |
| 202. | Workmanship (see 3.3) | Visual/Manual |

4.3.2.1.4 Packing and Marking for Storage and Shipments
(see dwg 8808362 and 5.2).

| <u>Categories</u> | <u>Characteristics</u> | <u>Method of Inspection</u> |
|-------------------|------------------------|-----------------------------|
|-------------------|------------------------|-----------------------------|

Critical: None defined.

Major:

| | | |
|------|-------------------------------------|---------------|
| 101. | Gross load weight, max | *Measure |
| 102. | Contents tight in package | Manual |
| 103. | Correctly packed | Visual/Manual |
| 104. | Material (see 3.1) | Visual |

*Determine weight with suitable scale.

Minor:

| | | |
|------|---------------------------------|---------------|
| 201. | Marking | Visual |
| 202. | Workmanship (see 3.3) | Visual/Manual |

4.3.3 Testing. Not Applicable.4.3.4 Acceptance inspection equipment.4.3.4.1 Critical and major characteristics and tests.

Inspection and testing shall be performed with the acceptance inspection equipment, operating instructions, and calibration instructions specified on the Equipment Lists (EL) (See EL-8795698). When either of the conditions listed below exist, the contractor shall design required equipment or specify suitable commercial equipment and obtain approval in 6.3 prior to use on the contract.

- Any deviation from equipment or procedures specified on the EL is desired (see 6.3).
- The code "CD" is listed in the "Part or Identifying Number" column on the EL (see 6.1.2).

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4.3.4.2 Minor characteristics and tests. Acceptance inspection equipment for minor characteristics is not specified on ELs. The acceptance inspection equipment, operating instructions and calibration instructions used by the contractor for minor classification inspection shall be approved by the Government representative authorized by the procuring agency.

4.4 Test methods. Not Applicable.

5. PREPARATION FOR DELIVERY

5.1 Production items.

5.1.1 Preservation and packaging. Preservation and packaging shall be level A or C as specified (see 6.1).

5.1.1.1 Level A. The plug shall be preserved and packaged in accordance with instructions contained in MIL-STD-1169 (MU).

5.1.1.2 Level C. The plug shall be preserved and packaged in accordance with instructions contained in MIL-STD-1169 (MU).

5.1.2 Packing.

5.1.2.1 Levels A and C. The plug shall be packed in accordance with the applicable instructions contained in MIL-STD-1169(MU).

5.1.3 Marking. Marking shall be in accordance with MIL-STD-1169 (MU).

5.2 Repair parts.

5.2.1 Preservation and packaging. Preservation and packaging shall be level A or C as specified (see 6.1).

5.2.1.1 Level A. The plug shall be packaged in accordance with dwg 8883535 and 8808362 using the specified moisture barrier.

5.2.1.2 Level C. The plug shall be packaged in accordance with dwg 8808362 except that the moisture barrier may be omitted.

5.2.2 Packing.

5.2.2.1 Level A and C. The plug shall be packed in accordance with dwg 8883535 and 8808362

5.2.3 Marking. Marking shall be as specified in accordance with dwg 8883535 and 8808362 as applicable.

6. NOTES

6.1 Ordering data. Procurement documents should specify:

6.1.1 Procurement requirements.

- a. Title, number, and date of this specification.
- b. Production or repair part.
- c. Selection of applicable level of packaging and packing required (see 5.1 and 5.2).

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- d. Specification of dwg part no. for bag used in packaging.

6.1.2 Contract data requirements (see 4.3.4.1). Data specified in 4.3.4.1 will be delivered as identified in 4.3.4.1 will be delivered as identified on a numbered DD Form 1664 when specified on a DD Form 1423 incorporated in the contract.

6.2 Objective evidence. Records of contractor quality control and inspections which can be verified.

6.3 Acceptance inspection equipment (see 4.3.4.1). The contractor shall obtain approval from the Commanding Officer Picatinny Arsenal, Dover, New Jersey 07801, ATTN: SMUPA-NR4.

Custodian:
Army - MU

Preparing activity:
Army - MU

Project No. 110-A024

| SPECIFICATION ANALYSIS SHEET | | Form Approved Budget Bureau No. 22-R255 |
|--|--|--|
| <p>INSTRUCTIONS: This sheet is to be filled out by personnel, either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.</p> | | |
| <p>SPECIFICATION MIL-P-50959(MU) Plug, Machine Thread</p> | | |
| <p>ORGANIZATION</p> | | |
| <p>CITY AND STATE</p> | | <p>CONTRACT NUMBER</p> |
| <p>MATERIAL PROCURED UNDER A <input type="checkbox"/> DIRECT GOVERNMENT CONTRACT <input type="checkbox"/> SUBCONTRACT </p> | | |
| <p>HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE? A. GIVE PARAGRAPH NUMBER AND WORDING. </p> | | |
| <p>B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES</p> | | |
| <p>2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID</p> | | |
| <p>3. IS THE SPECIFICATION RESTRICTIVE? <input type="checkbox"/> YES <input type="checkbox"/> NO (If "yes", in what way?) </p> | | |
| <p>4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)</p> | | |
| <p>SUBMITTED BY (Printed or typed name and activity - Optional)</p> | | <p>DATE</p> |

DD FORM 1426
1 JAN 66

REPLACES EDITION OF 1 OCT 64 WHICH MAY BE USED.

FOLD

DEPARTMENT OF THE ARMY

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Commanding Officer
Picatinny Arsenal
ATTN: SMUPA-NR
Dover, New Jersey 07801

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NOTICE OF INACTIVATION
FOR NEW DESIGN

INCH-POUND

MIL-P-50959 (AR)
NOTICE 3
21 June 1995

MILITARY SPECIFICATION

PLUG, MACHINE THREAD

This notice should be filed in front of MIL-P-50959 (AR),
dated 03 September 1971

MIL-P-50959 (AR) dated 03 September 1971, with Validation Notice 2, dated 20 August 1991
is inactive for new design and is no longer used, except for replacement purpose.

Preparing Activity:
Army-AR

AMSC N/A

FSC 1110

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