

NOT MEASUREMENT SENSITIVE
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MIL-P-10603E  
21 November 1990  
SUPERSEDING  
MIL-P-10603D  
2 December 1975

## MILITARY SPECIFICATION

### PUMPS AND PUMPING UNITS, CENTRIFUGAL, POWER-DRIVEN, FOR WATER, PACKAGING OF

This specification is approved for use by all Departments and Agencies of the Department of Defense.

#### 1. SCOPE

1.1 Scope. This specification covers the requirements for methods, materials, and procedures for the preservation, packing, and marking of pumps and pumping units, centrifugal, power-driven, for water.

#### 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 issues of these documents are 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-P-664	- Primer, Coating, Alkyd, Corrosion-Inhibiting, Lead and Chromate Free, VOC-Compliant.
UU-T-81	- Tags, Shipping and Stock.
PPP-B-601	- Boxes, Wood, Cleated-Plywood.
PPP-B-621	- Boxes, Wood, Nailed and Lock-Corner.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: USA Belvoir Research, Development, and Engineering Center, ATTN: STRBE-TSE, Fort Belvoir, VA 22060-5606 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.
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AMSC N/A

FSC PACK

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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- PPP-B-636 - Boxes, Shipping, Fiberboard.
- PPP-B-640 - Boxes, Fiberboard, Corrugated, Triple-Wall.
- PPP-P-40 - Packaging and Packing of Hand Tools.

## MILITARY

- MIL-C-104 - Crates, Wood; Lumber and Plywood Sheathed, Nailed and Bolted.
- MIL-P-116 - Preservation, Methods of.
- MIL-B-121 - Barrier Material, Greaseproofed, Waterproofed, Flexible.
- MIL-C-3774 - Crates, Wood; Open 12,000- and 16,000-Pound Capacity.
- MIL-E-10062 - Engines: Preparation for Shipment and Storage of.
- MIL-T-22085 - Tape, Pressure-Sensitive Adhesive, Preservation and Sealing.
- MIL-B-26195 - Box, Wood-Cleated, Skidded, Load-Bearing Base.
- MIL-V-62038 - Vehicle, Wheeled, Preparation for Shipment and Storage of.

## STANDARDS

## FEDERAL

- FED-STD-101 - Preservation, Packaging and Packing Materials, Test Procedures.

## MILITARY

- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
- MIL-STD-129 - Marking for Shipment and Storage.
- MIL-STD-1186 - Cushioning, Anchoring, Bracing, Blocking and Waterproofing; with Appropriate Test Methods.

(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.)

2.2 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 documents cited in the solicitation (see 6.2).

## AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- D 3953 - Strapping, Flat Steel and Seals.
- D 4675 - Selection and Use of Flat Strapping Materials.

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

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NATIONAL MOTOR FREIGHT TRAFFIC ASSOCIATION (NMFTA)

National Motor Freight Classification

(Application for copies should be addressed to the American Trucking Association, ATTN: Traffic Order Section, 2200 Mill Road, Alexandria, VA 22314.)

UNIFORM CLASSIFICATION COMMITTEE (UCC)

Uniform Freight Classification

(Application for copies should be addressed to the Uniform Classification Committee, ATTN: Tariff Publishing Officer, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

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 takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Materials. Materials shall be as specified herein and in applicable specifications and standards. Materials not specified shall be selected by the contractor and shall be subject to all provisions of this specification. Materials shall be free of defects.

3.2 Caution. Type P-14 preservative shall be used on all interior surfaces of pumps, pumping units, water tanks, or any connecting components if they are to be used for potable water.

3.3 First article. Unless otherwise specified (see 6.2), a sample shall be subjected to first article inspection (see 6.3) in accordance with 4.3.

3.4 Preservation. Preservation shall be level A or C as specified (see 6.2).

3.4.1 Level A.

3.4.1.1 Pumps and pumping units weighing not more than 25 pounds. Pumps and pumping units weighing not more than 25 pounds shall have the interior surfaces coated with type P-10 preservative, type I, grade 30 (see 3.4.1.2.3) by spraying or fogging through the suction and discharge pipe taps while the pump is slowly actuated. Spraying or fogging shall continue long enough to assure complete coverage. Excess preservative shall be drained and the openings sealed with plastic caps or plugs as applicable. Each pump or pumping unit with the required repair parts, tools, and technical publications preserved as specified in 3.4.1.2.14, 3.4.1.2.15, and 3.4.1.2.16, shall then be preserved together in accordance with MIL-P-116, method IA-14. The inner container shall be a close-

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fitting box conforming to PPP-B-636, class domestic, variety SW, grade 125 or 175, style optional. The outer container shall be a close-fitting box conforming to PPP-B-636, W6c or W5c.

3.4.1.2 Pumps and pumping units weighing more than 25 pounds. Pumps and pumping units weighing more than 25 pounds shall be preserved and packaged as follows.

3.4.1.2.1 Disassembly. Disassembly shall be limited to that necessary to safeguard parts vulnerable to damage and loss and to the removal of protruding parts that increase cubage. Bolts, nuts, washers, and pins involved shall be placed in one of the mating parts and secured to prevent their loss. Keys removed shall be secured in the keyway of the shaft.

3.4.1.2.2 Matchmarking. When necessary to facilitate reassembly, parts removed shall be matchmarked with cloth tags conforming to UU-T-81, type A and the marked tags attached to the mating parts. The information on the tags shall be applied with waterproof ink.

3.4.1.2.3 Preservatives. Preservatives specified herein shall conform to the applicable specifications listed in and shall be applied in accordance with MIL-P-116.

3.4.1.2.4 Unprotected surfaces. Unpainted exterior metal surfaces requiring the application of a contact preservative in accordance with MIL-P-116 and not specifically specified herein or in the end item specification shall be coated with preservative as follows.

3.4.1.2.4.1 Unfinished surfaces. Unfinished exterior metal surfaces shall be coated with type P-1 preservative.

3.4.1.2.4.2 Machined surfaces. Exposed machined surfaces shall be coated with type P-6 preservative and wrapped or covered with barrier material conforming to MIL-B-121, type I, grade A, class 2, secured in place with tape conforming to MIL-T-22085, type II.

3.4.1.2.5 Water tanks. Interior surfaces of uncoated water tanks, except potable water tanks shall be fogged with type P-10 preservative, type I, grade 30.

3.4.1.2.6 Single-stage pumps. Single-stage pumps shall be drained and dried. The interior surface of the casings and all parts within the casings shall be coated with type P-10 preservative, type I, grade 30. Small general-purpose pumps shall be coated by spraying or fogging the interior with the preservative through the suction and discharge pipe taps while the pumps are slowly actuated. Spraying or fogging shall continue long enough to insure complete coverage.

3.4.1.2.7 Multistage pumps. Multistage pumps shall be drained and dried. Internal surfaces of pumps having horizontally- and vertically-split casings shall be coated with type P-10 preservative, type I, grade 30 by slushing. Excess preservative shall be drained and the threads of the drain plugs coated with the preservative and reinstalled.

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3.4.1.2.8 Openings. All threaded openings shall be sealed with threaded metal or plastic caps or plugs as applicable. All flanged openings shall be sealed with blind metal flanges, with barrier material conforming to MIL-B-121, type I, grade A, class 2 placed between the flange face and the blind flange. All other openings shall be sealed with barrier material specified above, secured in place with tape conforming to MIL-T-22085, type II.

3.4.1.2.9 Gages and flow meters. Gages and flow meters removed from the pumps shall be individually preserved in accordance with MIL-P-116, method IC-2, using a close-fitting box conforming to PPP-B-636, W6c or W5c.

3.4.1.2.10 Engine. The engine and engine accessories shall be preserved in accordance with the level A requirements of MIL-E-10062, type II, method I for units to be packed in containers. For units to be shipped uncrated (mobile), type I, method I shall be used.

3.4.1.2.11 Electric motors. Electric motors shall have all openings sealed with tape conforming to MIL-T-22085, type II.

3.4.1.2.12 Drivebelts and pulleys. Drivebelts shall be removed or released from tension. Removed belts shall be preserved in accordance with MIL-P-116, method IC-1 or IC-3. Unpainted pulley grooves shall be coated with primer conforming to TT-P-664.

3.4.1.2.13 Trailer chassis. Trailer chassis, with the pumps mounted, shall be preserved in accordance with the level A preservation and packaging requirements of MIL-V-62038.

3.4.1.2.14 Repair parts. The preservative application criteria and applicable method(s) of preservation of MIL-P-116 shall be used to preserve repair parts.

3.4.1.2.15 Maintenance tools. Maintenance tools shall be preserved in accordance with PPP-P-40, level A.

3.4.1.2.16 Technical publications. Technical publications shall be preserved together in accordance with MIL-P-116, method IC-1 or IC-3.

3.4.1.2.17 Other components. Other components not specifically mentioned herein requiring protection from corrosion or physical or mechanical damage shall be preserved as specified for components of similar design and construction.

3.4.1.2.18 Consolidation. Components removed from the pumps and pumping units, maintenance tools, technical publications, and repair parts shall be consolidated. When a toolbox is furnished, it shall be utilized as a container and the lid closed and secured. When a toolbox is not furnished or the components will not fit in the toolbox, they shall be consolidated in boxes. Wooden boxes conforming to PPP-B-601, overseas type, grade B, style optional shall be used for pumps and pumping units that are to be shipped uncrated or units to be packed in crates. Fiberboard boxes conforming to PPP-B-636, W5c shall be used for pumps and pumping units packed in wooden boxes.

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3.4.2 Level C. The pumps and all of their components shall be preserved in accordance with the contractor's standard practice in a manner to prevent deterioration and damage during shipment from the contractor to the initial destination. The pumps shall be lubricated for operation as required in the operator's service manual.

3.4.2.1 Trailer chassis. Trailer chassis with the pump mounted shall be preserved in accordance with level C preservation and packaging requirements of MIL-V-62038.

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

3.5.1 Level A.

3.5.1.1 Pumps and pumping units weighing not more than 25 pounds. Small pumps and pumping units weighing not more than 25 pounds, preserved as specified in 3.4, shall be packed together in a close-fitting box conforming to PPP-B-601, overseas type, grade B, style optional, in quantities not to exceed the weight limitations of the box. The box shall be closed and strapped in accordance with the appendix to the box specification. The strapping shall conform to ASTM D 3953, type 1 or 2, zinc-coated, size as applicable and ASTM D 4675.

3.5.1.2 Pumps and pumping units weighing more than 25 pounds and less than 1000 pounds. Pumps and pumping units weighing more than 25 pounds and less than 1000 pounds, preserved as specified in 3.4, shall be packed together or individually, as applicable, in a close-fitting box conforming to PPP-B-601, overseas type, grade B, style optional, or PPP-B-621, class 2, style optional. The gross weight shall not exceed the weight limitations of the box. The contents shall be blocked, braced, and anchored within the box in accordance with MIL-STD-1186 in a manner to prevent free movement or damage. Box closure and strapping shall be in accordance with the appendix to the box specification. The strapping shall conform to ASTM D 3953, type 1 or 2, zinc-coated, size as applicable and ASTM D 4675.

3.5.1.3 Pumps and pumping units weighing more than 1000 pounds. Pumps and pumping units weighing more than 1000 pounds, preserved as specified in 3.4, shall be packed individually in a close-fitting crate conforming to MIL-C-104, type I, class 1 or 2, style A, or in a close-fitting box conforming to MIL-B-26195, type II, style and class optional; as applicable to the weight of the pump or pumping unit to be packed. Blocking, bracing, and anchoring of the contents to the crate or box base shall be in accordance with the appendix to the crate specification and in accordance with MIL-STD-1186.

3.5.1.4 Pumps and pumping units trailer mounted. Pumps and pumping units mounted on highway type trailers shall be shipped uncrated (mobile), consolidated components, accessories, and repair parts for each unit shall be positioned and secured to the unit in such a manner as not to interfere with towing or lifting of the unit with slings. Pumps and pumping units mounted on nonhighway type trailers shall be packed as specified in 3.5.1.2 or 3.5.1.3 as applicable.

3.5.2 Level B.

3.5.2.1 Pumps and pumping units weighing not more than 25 pounds. Small pumps and pumping units weighing not more than 25 pounds, preserved as specified in



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3.4, shall be packed together or individually, as applicable, in a close-fitting wood box conforming to PPP-B-601, domestic type, style optional; in a fiberboard box conforming to PPP-B-636, V3c, V11c, V13c, or V15c; or PPP-B-640, class 2, style optional. The gross weight or size of each box shall not exceed the limitations of the applicable box specification. Box closure shall be in accordance with the appendix to the applicable box specification. Strapping may be zinc-coated.

3.5.2.2 Pumps and pumping units weighing more than 25 pounds and less than 1000 pounds. Pumps and pumping units weighing more than 25 pounds and less than 1000 pounds shall be packed as specified in 3.5.1.2 except boxes shall be domestic type or class as applicable. Box closure shall be in accordance with the appendix to the applicable box specification. Strapping may be zinc-coated.

3.5.2.3 Pumps and pumping units weighing more than 1000 pounds. Pumps and pumping units weighing more than 1000 pounds, preserved as specified in 3.4, shall be packed individually in a close-fitting crate conforming to MIL-C-3774, type I, style A, or in a close-fitting box conforming to MIL-B-26195, type I, style and class optional, as applicable to the weight of the pump or pumping unit to be packed. Blocking, bracing, and anchoring of the contents to the crate or box base, and protection of the contents packed in an open crate with a full shroud, shall be in accordance with the appendix to the applicable crate specification and in accordance with MIL-STD-1186.

3.5.2.4 Pumps and pumping units trailer mounted. Pumps and pumping units mounted on highway type trailers shall be shipped uncrated (mobile). Consolidated components, accessories, and repair parts for each unit shall be positioned and secured to the unit in such a manner as not to interfere with towing or lifting of the unit with slings. Pumps and pumping units mounted on nonhighway type trailers shall be packed as specified in 3.5.2.2 or 3.5.2.3 as applicable.

3.5.3 Level C. Pumps and pumping units, preserved as specified in 3.4, shall be packed to assure carrier acceptance and safe delivery to destination at lowest ratings in compliance with Uniform Freight Classification rules or National Motor Freight Classification rules.

3.5.3.1 Pumps and pumping units trailer mounted. Pumps and pumping units mounted on highway type trailers shall be shipped as specified in 3.5.2.4. Pumps and pumping units mounted on nonhighway type trailers shall be packed as specified in 3.5.3.

3.6 Marking. In addition to any special marking specified in the contract or purchase order (see 6.2), marking shall be in accordance with MIL-STD-129.

3.7 Workmanship. Workmanship shall be such as to provide maximum protection to the pumps and pumping units by application of the requirements specified herein, to prevent corrosion, deterioration, and mechanical or physical damage during handling, shipment, and storage.

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## 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 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 ensure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items shall meet all requirements of section 3. 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 ensuring that all products or supplies submitted to the government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the government to acceptance of defective material.

4.1.2 Material inspection. The contractor is responsible for insuring that supplies and materials are manufactured, examined, and tested in accordance with referenced specifications and standards, as applicable.

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

- a. First article pack inspection (see 4.3).
- b. Quality conformance inspection (see 4.4).

4.3 First article pack inspection.

4.3.1 Examination. The first article pack shall be examined as specified in 4.4.1. Presence of one or more defects shall be cause for rejection.

4.3.2 Tests. The first article pack for level A or B shall be tested in accordance with 4.3.2.1 and 4.3.2.2, as applicable to the gross weight of the box or crate. Failure of the applicable test shall be cause for rejection.

4.3.2.1 Boxed pumps or pumping units not exceeding 200 pounds gross weight. Boxed pumps or pumping units not exceeding 200 pounds gross weight shall be subjected to the free-fall drop test in accordance with FED-STD-101, test method 5007, procedure E.

4.3.2.2 Boxed or crated pumps or pumping units exceeding 200 pounds gross weight. Boxed or crated pumps or pumping units exceeding 200 pounds gross weight shall be subjected to the guided-impact test (railroad-car) in MIL-STD-1186, appendix A. The test car shall strike a string of five empty cars with draft gear extended and the brakes set at a speed of not less than 10 or more than 11 miles per hour.



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4.3.3 Basis for rejection. Any shifting of contents, loosening or breaking of holddowns, ties, stays, blocking or bracing, or any visual damage to the contents shall constitute failure of the first article pack and shall be cause for rejection. In addition, the pump or pumping unit shall be subjected to the operational test(s) specified in the end item specification. Any malfunction contributable to the first article pack test shall be cause for rejection.

4.4 Quality conformance inspection.

4.4.1 Inspection stages. Inspection shall be in two stages as follows:

- a. The first stage shall include inspection of materials, methods, containers, and markings in shipping containers.
- b. The second stage shall include inspection of materials, shipping container, and marking.

4.4.2 Unit of product. For the purpose of inspection, a unit of product for the first stage of inspection shall be a complete pack with the shipping container top not in place or not closed. For the second stage of inspection, a unit of product shall be a complete pack prepared for shipment.

4.4.3 Sampling. Sampling for examination shall be in accordance with MIL-STD-105. Samples shall be selected in accordance with MIL-STD-105, tables I and IIa.

4.4.4 Examination. Samples selected in accordance with 4.4.3 shall be examined for the defects marked "X" for the applicable level in table I.

TABLE I. Classification of defects.

No.	Defect	Level		
		A	B	C
101.	Materials, methods, and containers not as specified. Each incorrect material, method, and container shall constitute one defect (see 3.1, 3.3, and 3.4).	X	X	-
102.	Unspecified type preservative applied to surface of components that would contact potable water (see 3.2).	X	-	-
103.	Disassembly not as specified (see 3.4.1.2.1).	X	-	-
104.	Matchmarking not as specified (see 3.4.1.2.2).	X	-	-
105.	Matchmarking information not applied with waterproof ink (see 3.4.1.2.2).	X	-	-
106.	Unprotected metal surfaces not coated with preservatives as specified (see 3.4.1.2.4.1 and 3.4.1.2.4.2).	X	-	-
107.	Preserved machined surfaces not wrapped or covered with barrier material and the wraps or covers not secured with tape as specified (see 3.4.1.2.4.2).	X	-	-
108.	Interior surfaces of uncoated water tanks not coated with preservative as specified (see 3.4.1.2.5).	X	-	-
109.	Single-stage pumps not preserved as specified (see 3.4.1.2.6).	X	-	-
110.	Multistage pumps not preserved as specified (see 3.4.1.2.7)	X	-	-

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TABLE I. Classification of defects. (continued)

No.	Defect	Level		
		A	B	C
111.	Openings not sealed as specified (see 3.4.1.2.8).	X	-	-
112.	Removed gages and flow meters not preserved as specified (see 3.4.1.2.9).	X	-	-
113.	Engine and engine accessories not preserved in accordance with the referenced documents (see 3.4.1.2.10).	X	-	-
114.	Openings into electric motors not sealed as specified (see 3.4.1.2.11).	X	-	-
115.	Drive belts not removed or released from tension (see 3.4.1.2.12).	X	-	-
116.	Unpainted pulley grooves not coated with primer as specified (see 3.4.1.2.12).	X	-	-
117.	Trailer chassis not preserved in accordance with the referenced document (see 3.4.1.2.13).	X	-	-
118.	Maintenance tools not preserved in accordance with the referenced document (see 3.4.1.2.15).	X	-	-
119.	Components requiring preservation and not specifically mentioned not preserved as specified for similar components (see 3.4.1.2.17 and 3.4.2).	X	-	X
120.	Consolidation not as specified (see 3.4.1.2.18).	X	-	-
121.	Pumps and components not preserved and lubricated as specified (see 3.4.2 and 3.4.2.1).	-	-	X
122.	Pumps or pumping units packed together or separately exceeds the limitations of the box (see 3.5.1.1, 3.5.1.2, 3.5.1.3, 3.5.2.1, 3.5.2.2, and 3.5.2.3).	X	X	-
123.	Strapping not as specified (see 3.5.1.1 and 3.5.1.2).	X	-	-
124.	Blocking, bracing, and anchoring not in accordance with the referenced document and as specified (see 3.5.1.2, 3.5.1.3, 3.5.2.2, and 3.5.2.3).	X	X	-
125.	Securing of components to mobile pumps not as specified (see 3.5.1.4 and 3.5.2.4).	X	X	-
126.	Contents not protected with a full shroud as specified (see 3.5.2.3).	-	X	-
127.	Pumps and components not packed in accordance with referenced document for level C (see 3.5.3).	-	-	X
128.	Marking missing, illegible, incorrect, or incomplete (see 3.6).	X	X	X
129.	Workmanship not as specified (see 3.7).	X	X	X

## 5. PACKAGING

(This section is not applicable to this specification.)

## 6. NOTES

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

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6.1 Intended use. It is intended that this specification cover the preservation, packing, and marking requirements of pumps and pumping units and shall be used for reference in section 5 of equipment specifications or for direct reference in contracts or purchase orders, or in the preparation of packaging data sheets.

6.2 Acquisition requirements. Acquisition documents should specify the following:

- a. Title, number, and date of the specification.
- b. 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).
- c. Time frame required for submission of the first article pack (see 3.3).
- d. Level of preservation and packing required (see 3.4 and 3.5).
- e. When other than zinc-coated strapping is required (see 3.5.2.1 and 3.5.2.2).
- f. Any special marking (see 3.6).

6.3 First article pack. The first article pack may be accomplished utilizing either the first preproduction model or a production model. If the preproduction model is utilized, any preservation and packing shall be removed by the contractor at no expense to the Government, when requested by the Government, to facilitate comparison between the preproduction model and the production model. Any changes or deviations of production packs from the approved preproduction pack will be subject to the approval of the contracting officer. Approval of the preproduction pack will not relieve the contractor of his obligation to preserve, pack, and mark the pumps and accessories in accordance with this specification.

6.4 Subject term (key word) listing.

Marking  
Packing  
Preservation

6.5 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

## Custodians:

Army - ME  
Navy - YD  
Air Force - 99

## Preparing activity:

Army - ME

Project 4320-0314

## Review activities:

Army - SM  
Air Force - 84



## 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.

<b>RECOMMEND A CHANGE</b>		1. DOCUMENT NUMBER MIL-P-10603E	2. DOCUMENT DATE (YYMMDD) 901121												
3. DOCUMENT TITLE Pumps and Pumping Units, Centrifugal, Power-Driven, for Water, Packaging Of															
4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)															
5. REASON FOR RECOMMENDATION															
<table border="1"> <tr> <td colspan="2">6. SUBMITTER'S NAME (Print Name)</td> <td colspan="2">7. ORGANIZATION</td> </tr> <tr> <td colspan="2">8. ADDRESS (Include Zip Code)</td> <td>9. TELEPHONE (Include Area Code)</td> <td>10. DATE SUBMITTED (YYMMDD)</td> </tr> <tr> <td colspan="2"></td> <td>11. AUTOVON (If Applicable)</td> <td></td> </tr> </table>				6. SUBMITTER'S NAME (Print Name)		7. ORGANIZATION		8. ADDRESS (Include Zip Code)		9. TELEPHONE (Include Area Code)	10. DATE SUBMITTED (YYMMDD)			11. AUTOVON (If Applicable)	
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		11. AUTOVON (If Applicable)													
8. PREPARING ACTIVITY															
a. NAME		b. TELEPHONE (Include Area Code)													
		(1) Commercial	(2) AUTOVON												
		(703) 664-5717	354-5717												
c. ADDRESS (Include Zip Code)		IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:													
US Army Belvoir RDE Center		Defense Quality and Standardization Office													
ATTN: STRBE-TSE		5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466													
Ft. Belvoir, VA 22060-5606		Telephone (703) 756-2340 AUTOVON 289-2340													



