INCH-POUND

MIL-P-24503B(SH)
22 August 1991
SUPERSEDING
MIL-P-24503A(SH)
12 April 1984
(See 6.6)

MILITARY SPECIFICATION

PACKING MATERIAL, GRAPHITIC, CORRUGATED RIBBON OR TEXTURED TAPE AND PREFORMED RING

This specification is approved for use by the Naval Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers various types, classes and grades of non-woven graphitic packing for steam valve service on Naval ships on which valve stuffing box temperatures are limited to a maximum of 1000 degrees Fahrenheit (°F).

1.2 Classification. The material shall be of the following types, classes and grades as specified (see 6.1 and 6.2).

Type I - Corrugated ribbon or textured tape.
Type II - Preformed ring.

Class 1 - For use where detrimental material content of the packing need not be controlled beyond normal manufacturing limits.
Class 2 - For use where detrimental material content must be controlled to the limits specified herein.

Grade I - Treated with corrosion inhibitor.
Grade N - No corrosion inhibitor.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Sea Systems Command, SEA 55Z3, Department of the Navy, Washington, DC 20362-5101 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 5330

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

PPP-F-320 - Fiberboard: Corrugated and Solid, Sheet Stock (Container Grade) and Cut Shapes.

MILITARY

MIL-L-19140 - Lumber and Plywood, Fire-Retardant Treated.

STANDARDS

MILITARY

MIL-STD-2073-1 - DOD Materiel Procedures for Development and Application of Packaging Requirements.

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Navy Publishing and Printing Service Office, Bldg. 4D, NPM-DODSSP, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.2 Non-Government publications. The following documents 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)

C 559 - Standard Test Method for Bulk Density by Physical Measurements of Manufactured Carbon and Graphite Articles.
C 561 - Standard Test Method for Ash in a Graphite Sample.
C 816 - Standard Test Method for Sulfur in Graphite by Combustion Iodometric Titration Method.
C 889 - Standard Test Methods for Chemical and Mass Spectrographic Analysis of Nuclear-Grade Gadolinium Oxide (Gd_2O_3) Powder.
D 129 - Standard Test Method for Sulfur in Petroleum Products (General Bomb Method). (DOD adopted)
D 512 - Standard Test Methods for Chloride Ion in Water.

D 1179 - Standard Test Methods for Fluoride Ion in Water. (DOD adopted)
D 3761 - Standard Test Method for Total Fluorine in Coal by the Oxygen Bomb Combustion/Ion Selective Electrode Method.
D 4239 - Test Method for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods.

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

(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 specification and the references cited herein (except for related associated detail specifications, specification sheets or MS standards), 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 First article. When specified (see 6.2), a sample shall be subjected to first article inspection (see 6.4) in accordance with 4.3.

3.2 Material. Requirements specified herein apply to class 1 and class 2 and grade I and grade N packing, except where noted (see 6.1.3 and 6.1.4).

3.2.1 Type I. The packing shall be made entirely of pure, flexible graphitic material, having no binders and meeting the requirements of table I.

3.2.2 Type II. Preformed packing rings shall be manufactured from graphitic material conforming to the requirements of table I.

3.2.2.1 Density. The bulk density of the finished preformed packing ring shall be as follows when tested in accordance with 4.5.4:

Die-formed rings - 90 + 5 - 10 pounds per cubic foot (lb/ft^3)
Laminated rings - 70 ± 5 lb/ft^3

TABLE I. Physical properties.

Property	Value	Unit	Test paragraph
Density, bulk	65 ± 10	Pounds per cubic foot (lb/ft^3)	4.5.1
Ash content, percent	5.0 (max)		4.5.2
Detrimental materials (class 2 only)		Maximum allowable impurity level in parts per million	4.5.3
Mercury (Hg)		10	
Sulfur (S)		750	
Total halogens (Chlorine, Bromine and Fluorine)		500	
Chlorine (Cl)		250	
Bromine (Br)		250	
Fluorine (F)		250	

3.2.2.2 Binder. If type II packing rings are manufactured by laminating pure flexible graphitic sheets, a binder meeting the requirements of 3.2.4 may be utilized but the rings must be processed for conversion of any binder used during the laminating process to an all carbonaceous material. A binder meeting the requirements of 3.2.4 may also be used to ensure the adherence of corrosion inhibiting treatments (see 3.2.3) on grade I packing.

3.2.3 Corrosion inhibiting treatments.

3.2.3.1 Grade I. Grade I packing shall be provided with a powdered zinc (type II only) corrosion inhibiting treatment (2 percent Zn, by weight, minimum). If no grade is specified for type II packing, grade I shall be provided.

3.2.3.2 Grade N. Grade N packing shall not contain corrosion inhibiting additives.

3.2.4 Prohibited additions. There shall be no intentional additions of any of the detrimental materials of table I or antimony, arsenic, bismuth, cadmium, lead, tin or zinc (grade N only) during the manufacture or packaging of the product.

3.2.5 Mercury exclusion. During manufacturing, fabrication, handling, packaging, and packing, the packing material shall not come in contact with mercury or mercury containing compounds.

3.3 Dimensions and tolerances.

3.3.1 Type I ribbon packing. Unless otherwise specified (see 6.2), the packing shall be uniformly coiled, spooled, or reeled according to table II.

TABLE II. Dimensions for type I ribbon packing.

Gauge thickness, inches minimum (min)	Width, inches ± 0.030	Length, feet, min
0.015	0.25	25
.015	.50	25
.015	.75	50
.015	1.00	50

3.3.2 Type II preformed packing. Unless otherwise specified (see 6.2) the tolerances for type II packing shall be in accordance with table III. The tolerance shall apply to finished rings prior to any cutting operations.

3.3.2.1 Split rings. The number of cuts (zero, one or two) shall be as specified (see 6.2). Cuts shall be made at approximately a 45 degree angle. When two cuts are required (separating the ring into two parts) the resulting parts shall be approximately the same size. If the number of cuts is not specified, single cut rings shall be provided.

TABLE III. Tolerances for type II packing (inches).

	Inside diameter (i.d.)	Outside diameter (o.d.)	Thickness
Laminated packing rings	+0.000 -0.005	+0.010 -0.000	± 1/32
Die formed ribbon packing rings	+0.030 -0.000	+0.000 -0.020	± 0.060

3.4 Installation instructions. Installation, use, and precautionary instructions shall be furnished with each unit package. The instructions may be in the form of labels or printed inserts that will not be affected by water or grease. Where the instructions are placed within any opaque package, the outside of the package shall be marked to indicate use instructions enclosed.

3.5 Simulated performance. There shall be no steam leakage from the packing gland during the simulated performance test at a pressure of 1200 ± 50 lb/in^2 and a temperature of 975 ± 25°F. There shall also be no corrosion or degradation of the packing gland at the completion of the test (see 4.5.4 and 6.3).

3.6 Workmanship. The packing shall be free from extraneous material and visual defects which may affect its serviceability. Visual defects (see 4.4.3.1) include holes or voids,

rips or tears, non-continuous length, lack of corrugation or textured surface area, creasing or crimping, holes or voids, delaminations (laminated rings) gouges, split rings not cleanly cut or lack of corrosion inhibitor (grade I packing).

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 assure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items shall meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractors 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 the 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 accept defective material.

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

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

4.3 First article inspection. First article inspection shall consist of the examination of 4.4.3.1 and tests specified in 4.5.

4.4 Quality conformance inspection.

4.4.1 Lot. Unless otherwise specified herein, a lot shall consist of all finished packing of one size, type, class and grade produced in a continuous run or at the same time under the same conditions. The sampling unit shall be one spool, reel, or coil of packing or packing rings, as applicable, as necessary to enable performance of the required examinations or tests.

4.4.2 Sampling.

4.4.2.1 Sampling for visual and dimensional examination. As a minimum, the contractor shall randomly select a quantity of sampling units from each lot in accordance with table IV and subject them to the examinations of 4.4.3.1. The sample size depends on the lot size. If one or more defects are found in any sample, the entire lot shall be rejected. The contractor has the option of screening 100 percent of the rejected lot for the defected characteristics or providing a new lot, which shall be inspected in accordance with the sampling plan herein. The contractor shall maintain for a period of 3 years after contract completion, records of inspections, tests, and any resulting rejections.

TABLE IV. Sampling for visual and dimensional and examination and preparation for delivery.

Lot size	Sample size
2 to 50	5
51 to 90	7
91 to 150	11
151 to 280	13
281 to 500	16
501 to 1200	19
1201 to 3200	23
3201 to 10,000	29
10,001 to 35,000	35
35,001 to 500,000 (and above)	40

4.4.2.2 Sampling for examination for preparation for delivery. The lot size shall be the number of shipping containers in the end item inspection lot. Sampling shall be in accordance with table IV.

4.4.2.3 Sampling for quality conformance tests. A single random sample shall be selected from each lot.

4.4.3 Examinations.

4.4.3.1 Examination for visual and dimensional defects. Each unit selected in accordance with 4.4.2.1 shall be surface examined and measured to determine conformance with the requirements which do not require tests (see 3.6 and table V).

TABLE V. Classification of visual defects.

Item	Category - Major
Ribbon packing	Void Rip or tear in ribbon Particulate or extraneous matter on surface Non-continuous length (no joints) Lack of corrugation or textured surface area Creasing or crimping
Preformed packing	Holes or voids Particulate or extraneous matter on surface Delaminations (laminated rings Gouges Split rings not cut cleanly Lack of corrosion inhibitor (grade I only)

4.4.3.2 Inspection of packaging. Sample packages and packs, and the inspection of the preservation, packing and marking for shipment, stowage, and storage shall be in accordance with the requirements of section 5 and the documents specified therein (see table VI).

TABLE VI. Inspection of packaging defects.

Examine	Defect
Packaging	Not the level specified; not in accordance with contract requirements. Not packaged in unit containers as specified. Mixed type and size in the same container; containing less than indicated or specified quantity.

TABLE VI. Inspection of packaging defects. - Continued

Examine	Defect
Packing	Not the level specified; not in accordance with the contract requirements. Packing material not as specified; closures not accomplished by specified methods or materials. Gross weight of shipping container exceeds specified limit.
Marking	Interior and exterior marking omitted, illegible, incorrect, incomplete, not in accordance with contract requirements.

4.4.4 Quality conformance tests. The sample selected in accordance with 4.4.2.3 shall be tested as specified in 4.5.1, 4.5.2, and 4.5.3. If a sample does not conform to all the test requirements, this shall be cause for rejection of the lot which it represents.

4.5 Test procedures.

4.5.1 Bulk density. The bulk density of the type I and II materials shall be determined in accordance with ASTM C 559.

4.5.2 Ash content. The ash content of the type I and II materials shall be determined in accordance with ASTM C 561.

4.5.3 Detrimental material tests. For determination of the detrimental materials listed in table I for class 2 only, the test methods of table VII or alternate methods of equal or improved accuracy and precision shall be used.

TABLE VII. Detrimental material tests.

Element	Preparation/analysis test methods
Chlorine (Cl), Bromine (Br)	(1) Pyrohydrolysis (ASTM C 889)/Ion Chromatographic Analysis (2) ASTM D 129/ASTM D 512
Fluorine (F)	(1) Pyrohydrolysis (ASTM C 889)/Selective Ion Electrode or Ion Chromatographic Analysis (2) ASTM D 129/ASTM D 1179 (3) ASTM D 3761 (sample preparation and analysis)
Sulfur (S)	(1) High temperature combustion in 100 percent Oxygen/Non-dispersive infrared analysis or Ion Chromatographic Analysis

TABLE VII. Detrimental material tests. - Continued

Element	Preparation/analysis test methods
Mercury (Hg) (None intentionally added)	(2) ASTM C 816 (sample preparation and analysis) (3) ASTM D 4239 method 3 (sample preparation and analysis) (1) Direct analysis of volatile elements (Hg) by emission spectrographic method
NOTE: Where two preparation or analysis test methods are specified, either one is acceptable.	

The vendor shall provide certification that the limits of table I have been met and that low melting metals (Sb, As, Bi, Cd, Pb, Sn or Zn [Zn for grade 2 only]) have not been added as intentional constituents. In lieu of specific test results for the lot to be delivered, certifications may be based on tests of both raw materials and production lots of similar finished packing material over an extended time period (not exceeding 3 years between tests). Any change to manufacturing processing which affects product composition, including changes to raw material, binders or inhibitors (grade I) shall require additional testing to form the basis for future certifications.

4.5.4 Simulated performance. The test shall be conducted in an apparatus designed to simulate conditions in valves in actual service. A schematic of test rig is shown on figure 1. The valves used in the simulator shall have glands and stems that are in as new condition. The entire piping system and valves shall be insulated so as to minimize heat loss. Thermocouples shall be installed so as to indicate the actual steam temperature. The simulator shall be capable of holding a temperature of 975 ± 25°F and a pressure of 1200 ± 50 lb/in^2 for the duration of the test. The packing shall be installed and the gland initially adjusted so that no leakage occurs with the system at its operating temperature and pressure. The valve shall be fully cycled manually not less than once every half hour (full close to full open). The following schedule shall be followed for running the test: (test need not be conducted over a weekend period, if desired):

12 days ± 1 day at temperature 975 ± 25°F and 1200 ± lb/in^2 pressure
35 days ± 5 days at ambient temperature and pressure (system shut down; valves need not be cycled)
5 days ± 1 day at 975 ± 25°F temperature and 1200 ± 50 lb/in^2 pressure

Any leakage or gland adjustment shall be recorded. After the simulated performance test is once performed acceptably, providing product composition of processing has not been changed, a certificate of compliance may be accepted thereafter (see 3.5 and 6.3).

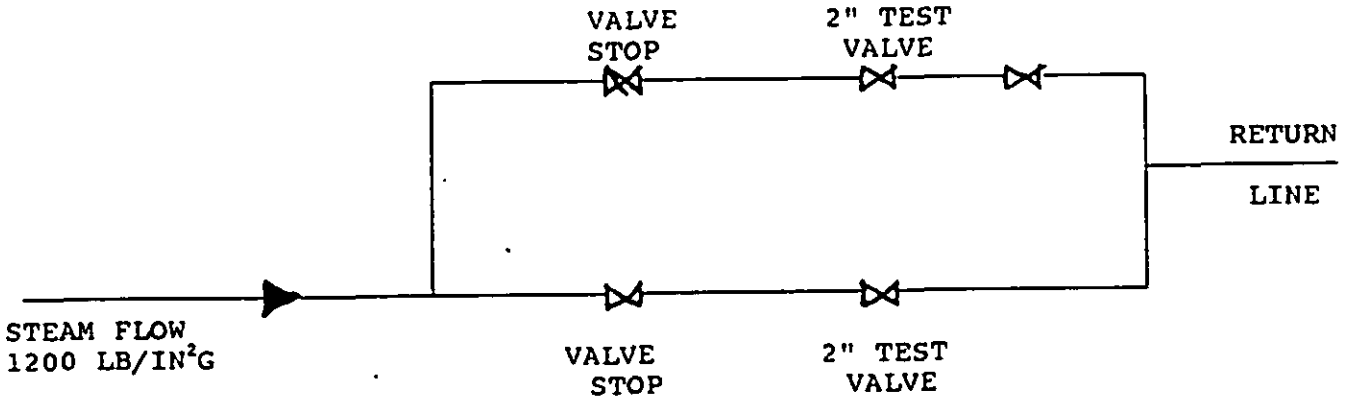

FIGURE 1. Test rig.

5. PACKAGING

(The packaging requirements specified herein apply only for direct Government acquisition.)

5.1 General.

5.1.1 Navy fire-retardant requirements.

(a) Treated lumber and plywood. Unless otherwise specified (see 6.2), all lumber and plywood including laminated veneer material used in shipping containers and pallet construction, members, blocking, bracing, and reinforcing shall be fire-retardant treated material conforming to MIL-L-19140 as follows:

Levels A and B - Type II - weather resistant.
Category 1 - general use.
Level C - Type I - nonweather resistant.
Category 1 - general use.

(b) Fiberboard. Fiberboard used in the construction of class-domestic, nonweather resistant fiberboard, cleated fiberboard boxes including interior packaging forms shall meet the flame spread index and the specific optic density requirements of PPP-F-320 and amendment thereto.

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

5.2.1 Level A. Packing, put-up as specified in 3.3.1, shall be protected by placing a wrap of greaseproof barrier material over the packing material and between the flanges of the spool or reel. The wrap shall be secured, utilizing pressure-sensitive tape. Packing material furnished in put-up form other than on spools or reels shall be completely wrapped

in barrier material and secured with tape as specified herein. The greaseproof barrier herein is not required when the unit container selected (see 5.2.1.1) is treated for greaseproofness or is inherently greaseproof.

5.2.1.1 Unit pack. Unit packs (unit containers) shall conform to MIL-STD-2073-1; appendix F, table I. Unless otherwise specified (see 6.2), container selection shall be at the contractor's option. Containers shall be of type weather resistant and conform to closure method V in accordance with the appendix of the box specification.

5.2.2 Level C. Graphitic packing material shall be preserved as specified for level A except that the unit containers specified in 5.2.1.1 shall be of the nonweather resistant type, class, or variety as applicable. Fiberboard box closure shall be in accordance with method I of the box specification, using pressure sensitive tape.

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

5.3.1 General requirement. Shipping containers shall contain identical quantities of identical material and shall be of minimum weight and cube, similar construction, and of uniform size.

5.3.2 Levels A, B, and C containers. Material preserved as specified (see 5.2) shall be packed in shipping containers for the level of packing specified (see 6.2), in accordance with MIL-STD-2073-1; appendix C, table VII. Unless otherwise specified (see 6.2), container selection shall be at the contractor's option.

5.3.2.1 Caseliners, closure and gross weight. Caseliner, closure, and gross weight shall be as specified in 5.3.2.1.1 through 5.3.2.1.3.

5.3.2.1.1 Caseliners. Unless otherwise specified (see 6.2), level A shipping containers containing level C unit pack containers shall be provided with waterproof caseliners in accordance with MIL-STD-2073-1.

5.3.2.1.2 Closure. Container closure, reinforcing, or banding shall be in accordance with the applicable container specification or appendix thereto except that class weather resistant fiberboard boxes shall be closed in accordance with method V and reinforced with nonmetallic or tape banding, and nonweather resistant fiberboard boxes shall be closed in accordance with method I using pressure sensitive tape.

5.3.2.1.3 Weight. Wood, plywood, and cleated type containers exceeding 200 pounds gross weight shall be modified by the addition of skids in accordance with MIL-STD-2073-1 and the applicable container specification or appendix thereto.

5.3.3 Container modification. Shipping containers exceeding 200 pounds gross weight shall be provided with the minimum of 3- by 4-inch nominal wood skids laid flat, or a skid- or sill-type base that will support the material and facilitate handling by mechanical handling equipment during shipment.

5.4 Marking. Marking shall be as specified in 5.4.1.

5.4.1 Levels A, B, and C. Item description marking shall include, as a minimum, the size, type, class and grade of the graphitic packing material. In addition to any special

marking required (see 6.2), level A, B, and C interior packs and shipping containers shall be marked in accordance with MIL-STD-2073-1, appendix F. In addition, bar coding shall be applied in accordance with the marking requirements of MIL-STD-2073-1.

6. NOTES

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

6.1 Intended use. Packing is intended for general shipboard service in valves. Grade I packing is intended for use in valves with noncorrosion-resistant (for example, carbon steel, 400 series stainless steel) stem and packing gland parts.

6.1.1 Type I. Type I packing is in corrugated ribbon or texture form for use where packing gland dimensions are not uniform or known.

6.1.2 Type II. Type II packing is similar to type I packing; however, because it is preformed, it is designed for applications in new equipment or equipment where packing gland dimensions are uniform or known and in excellent mechanical condition. Laminated rings require exact stuffing box dimensions to provide an interference fit for proper operation. The die molded ribbon packing requires only a drop in, but not loose, clearance with final gland compression setting the rings for proper operation.

6.1.3 Class 1. Class 1 is intended for use where detrimental material content of the packing need not be controlled beyond normal manufacturing limits.

6.1.4 Class 2. Class 2 is intended for use where detrimental material content must be kept to a minimum.

6.2 Acquisition requirements. Acquisition documents must specify the following:

(a) Title, number and date of this specification.
(b) Type, class and grade required (see 1.2).
(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).
(d) First article sample, if required (see 3.1).
(e) When (type I) ribbon packing is required (see 3.3.1).

(f) When preformed (type II) packing rings are desired, the size, inside diameter, outside diameter, number of cuts and number of packing rings required per set (see 3.3.2).
(g) When number of cuts in split rings are required (see 3.3.2.1).
(h) When fire-retardant materials are not required (see 5.1.1).
(i) Level of preservation and level of packing required (see 5.2, 5.2.1, 5.2.2, 5.3, 5.3.2).
(j) Container selection, if other than contractor's option (see 5.2.1.1 and 5.3.2).
(k) When caseliners are not required (see 5.3.2.1.1).
(l) Special markings required (see 5.4.1).

6.3 Consideration of data requirements. The following data requirements should be considered when this specification is applied on a contract. The applicable Data Item Descriptions (DIDs) should be reviewed in conjunction with the specific acquisition to ensure that only essential data are requested/
provided and that the DIDs are tailored to reflect the requirements of the specific acquisition. To ensure correct contractual application of the data requirements a Contract Data Requirements List (DD Form 1423) must be prepared to obtain the data, except where DOD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423.

Reference paragraph	DID number	DID title	Suggested tailoring
3.5, 4.5.4 and 4.3	DI-RELI-80939	Test and inspection report	------

The above DID was cleared as of the date of this specification. The current issue of DOD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL), must be researched to ensure that only current cleared DIDs are cited on the DD Form 1423.

6.4 First article. When first article inspection is required, the contracting officer should provide specific guidance to offerors whether the items should be a preproduction sample, a first article sample, a first production item, a sample selected from the first lot production items, a standard production item from the contractors current inventory (see 3.1), and the number of items to be tested as specified in 4.3. The contracting officer should also include specified instructions in acquisition documents regarding arrangements for examinations, approval of first article test results, and disposition of first articles. Invitations for bids should provide 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 products, 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. Bidders should not submit alternate bids unless specifically requested to do so in the solicitation.

6.5 Subject term (key word) listing.

Gland parts
Non-woven
Steam valve service
Stuffing box temperature
Valves

6.6 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. Material provided to previous revisions, and not marked to indicate the grade classification added by this revision, shall be considered to be grade N.

Preparing activity:
Navy - SH
(Project 5330-N150)

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.

I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER	2. DOCUMENT DATE (YYMMDD)
	MIL-P-24503B(SH)	1991 August 22

3. DOCUMENT TITLE
PACKING MATERIAL, GRAPHITIC, CORRUGATED RIBBON OR TEXTURED TAPE AND PREFORMED RING

4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as 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	b. TELEPHONE (Include Area Code)	
Technical Point of Contact (TOPC): Mr. Richard Dempsey (SEA 51432) PLEASE ADDRESS ALL CORRESPONDENCE AS FOLLOWS:	(1) Commercial TPOC: 703-602-0147	(2) AUTOVON 8-332-0147
c. ADDRESS (Include Zip Code) Commander, Naval SEa Systems Command Department of the Navy (SEA 5523) Washington, DC 20362-5101	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	