MIL-C-85052A
30 May 1984
Superseding
MIL-C-85052
7 October 1977

MILITARY SPECIFICATION

CLAMP, LOOP, CUSHION, GENERAL SPECIFICATION FOR

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

1. SCOPE

1.1 Scope. This specification establishes the requirements for clamps primarily intended for hydraulic system usage.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications, standards and handbooks. Unless otherwise specified, the following specifications, standards and handbooks of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation form a part of this specification to the extent specified herein.

SPECIFICATIONS

FEDERAL

A-A-711	Dry Cleaning Solvent
QQ-P-35	Passivation Treatments for Corrosion Resisting Steel
PPP-B-566	Box, Folding, Paperboard
PPP-B-576	Box, Wood, Cleated, Veneer, Paper Overlaid
PPP-B-585	Box, Wood, Wirebound
PPP-B-591	Boxes, Shipping, Fiberboard, Wood Cleated

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to the Naval Air Engineering Center, Engineering Specifications and Standards Department (Code 93), Lakehurst, NJ 08733, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

SPECIFICATIONS (Continued)

FEDERAL (Continued)

PPP-B-601	Boxes, Wood, Cleated Plywood
PPP-B-621	Box, Wood, Nailed and Locked-Corner
PPP-B-636	Box, Shipping, Fiberboard
PPP-B-640	Box, Fiberboard, Corrugated, Triple-Wall
PPP-B-665	Boxes, Paperboard, Metal Edged and Components
PPP-B-676	Boxes, Setup

MILITARY

MIL-P-116	Preservation, Methods of
MIL-H-5606	Hydraulic Fluid, Petroleum Base, Aircraft, Missile and Ordnance
MIL-T-5624	Turbine Fuel, Aviation, Grades JP-4 and JP-5
MIL-H-6875	Heat Treatment of Steels (Aircraft Practice), Process for
MIL-L-7808	Lubricating Oil, Aircraft Turbine Engine, Synthetic Base
MIL-S-25043	Steel Plate, Sheet and Strip, 17-7 PH, Corrosion Resistant, Precipation Hardening
MIL-H-83282	Hydraulic Fluid, Fire Resistant, Synthetic Hydrocarbon Base, Aircraft
MIL-C-85052/1	Clamp, Loop, Tube 17-7 Ph Cres, 275 Deg. F, Fuel and Petroleum Based Hydraulic Fluid Resistant
MIL-C-85052/2	Clamp, Loop, Tube 17-7 Ph Cres, 275 Deg. F, Phosphate Ester Fluid Resistant
MIL-C-85052/3	Clamp, Loop, Tube 17-7 Ph Cres, 500 Deg. F, General Purpose
MIL-C-85052/4	Clamp Support - Loop Clamp

STANDARDS

MILITARY

DOD-STD-100 Engineering Drawing Practices

MIL-STD-105 Sampling Procedures and Tables for Inspection by Attributes

MIL-STD-129 Marking for Shipment and Storage

MIL-STD-130 Identification Marking of U. S. Military Property

(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 Other publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issues of the documents which are indicated as DoD adopted shall be the issue listed in the current DoDISS and the supplement thereto, if applicable.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A582 Free-Machining Stainless and Heat-Resisting Steel Bars, Hot-Rolled or Cold-Finished

ASTM D395 Rubber Property, Compression Set

ASTM D412 Rubber Properties in Tension

ASTM D471 Rubber Property, Effect of Liquids

ASTM D624 Rubber, Property - Tear Resistance

ASTM D1149 Rubber Deterioration - Surface Ozone Cracking in a Chamber (Flat Specimen)

ASTM D2240 Rubber Property - Durometer Hardness

ASTM D3182 Rubber - Materials, Equipment and Procedures for Mixing Standard Compounds and Preparing Standard Vulcanized Sheets

ASTM E18 Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials

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

AEROSPACE MATERIALS SPECIFICATIONS (AMS)

AMS 4944 Titanium Alloy Tubing, Seamless Hydraulic 3.0 Al - 2.5V Cold Worked Stress Relieved

(Copies of SAE publications may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15098.)

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein, the text of this specification shall take precedence.

3. REQUIREMENTS

3.1 Specification sheets. The individual item requirements shall be as specified herein and in accordance with the applicable specification sheets. In the event of conflict between the requirements of this specification and the specification sheet, the requirements of the specification sheet shall govern.

3.2 Qualification. The clamps furnished under this specification shall be products which are qualified for listing on the applicable Qualified Products List (QPL) at the time set for opening of bids (see 4.3 and 6.3). In addition, the retention of the qualification for the clamp on the applicable Qualified Products List shall be dependent on periodic verification of continued compliance with the requirements of this specification (see 4.3.3).

3.2.1 The qualification required by this specification relates to qualification of the clamp only. It does not infer qualification of clamp installation techniques.

3.3 Materials. Clamp band material and cushioning material shall be as specified on the applicable specification sheet.

3.4 Design and construction. The design and construction of the clamp shall be as specified herein and in accordance with the applicable specification sheet.

3.4.1 Dimensions and tolerances. Dimensions and tolerances shall be as specified on the applicable specification sheet.

3.5 Performance. Clamp cushions, clamp bands and clamp assemblies shall conform to the requirements of this specification and the applicable specification sheet when subjected to the applicable tests specified in this specification and the applicable specification sheet.

3.5.1 Clamp cushion performance.

3.5.1.1 Physical properties. The cushion material shall meet the physical property requirements (Table II) specified in the applicable specification sheet (see 4.5.3.1).

3.5.1.2 Compression set. The average compression set value of three cushion material specimens shall not exceed the value specified in the applicable specification sheet (see 4.5.3.2).

3.5.1.3 Flammability. The cushion material shall be tested for flammability in accordance with the applicable specification sheet and as specified herein (see 4.5.3.3).

3.5.1.4 Titanium compatibility. There shall be no evidence of cracking or pitting of the titanium tube specimen when observed with a 5-10 power magnifying glass (see 4.5.3.4).

3.5.2 Clamp band performance.

3.5.2.1 Clamp band hardness. Clamp band hardness shall be 51-59 HR30N (see 4.4.3).

3.5.3 Clamp assembly performance.

3.5.3.1 Retention. Each clamp shall be tested in accordance with 4.5.4.1 both before and after being subjected to the vibration test (see 4.5.4.2). When tested in accordance with 4.5.4.1, each clamp shall withstand an axial mandrel force as specified below:

Clamp Band Thickness	Axial Force
0.020"	15-45 lbs
0.032"	25-55 lbs
0.040"	35-65 lbs

3.5.3.2 Vibration. The clamps shall not exhibit any evidence of cushion separation or other deterioration. There shall be no cracking or separation of metal components. The Transmissibility Ratio shall be recorded (see 4.5.4.2.1).

3.5.3.3 Ozone resistance. (When specified on applicable specification sheet.) The clamps shall not exhibit any evidence of cracking visible to the unaided eye, or distortion of the cushion material (see 4.5.4.3).

3.5.3.4 Thermal shock. The clamps shall not exhibit evidence of cracking, tackiness or degradation of the cushion material (see 4.5.4.4).

3.6 Surface texture. All surfaces shall have a smooth finish and be free from burrs and sharp edges. The inside edges of the clamp band shall be rolled or provided with a radius to eliminate sharp edges.

3.7 Identification of product.

3.7.1 Identification of clamps. All clamps shall be marked as specified on the sheet for the clamps being procured, or in accordance with MIL-STD-130, if not specified on the specification sheet. The item identification and part number requirements of DOD-STD-100 shall govern the part number and changes thereto.

3.8 Workmanship. Workmanship shall be of a sufficiently high grade to insure that clamps are of uniform quality and free from burrs, slivers, sharp edges, or other defects which would affect their service and shall be uniform in appearance without any mold flash.

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 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.

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

a. Qualification inspection (4.3).

b. Quality conformance inspection (4.4).

4.3 Qualification inspection.

4.3.1 Samples. Samples for qualification tests of clamps shall consist of 12 clamps of each specification sheet size (-2, -4, -6, -8, -10, -12, -16, -20, -24) plus 20 additional -16 size clamps. For qualification of MIL-C-85052/1 clamp only, submit 10 additional clamps in size -2. Samples for qualification tests on cushion material shall consist of 20 slabs conforming to ASTM D3182 for each type of cushion material to be tested. Each slab shall be identified by its specification sheet number and the direction of weave in fabric reinforced material. Both clamps and material test slabs shall be supplied for each specification sheet to be qualified in the quantities indicated herein.

4.3.2 Inspection routine. Sample units shall be subjected to the qualification inspection specified in Table I in the order specified, conducted on applicable specimens.

TABLE I. Qualification inspection.

CLAMP CUSHION			
Examination or Test	Requirement	Test	Number of Samples
Physical properties Compression set Flammability Titanium compatibility	3.5.1.1 3.5.1.2 3.5.1.3 3.5.1.4	4.5.3.1 4.5.3.2 4.5.3.3 4.5.3.4	(see 4.3.1)
CLAMP ASSEMBLY			
Examination or Test	Requirement	Test	Number of Samples
Examination of product Retention Vibration Retention *Ozone resistance Thermal shock	3.4 3.5.3.1 3.5.3.2 3.5.3.1 3.5.3.3 3.5.3.4	4.5.2 4.5.4.1 4.5.4.2 4.5.4.1 4.5.4.3 4.5.4.4	58 48 0 0 5 (see 4.3.1) 5 (see 4.3.1)

*When specified on applicable specification sheet.

4.3.3 Retention of qualification. To retain qualification, the contractor shall forward samples for testing at intervals of not more than two years. The qualifying activity shall establish the initial reporting date. The qualifying activity shall specify who will perform the following tests:

a. Examination of product (4.5.2).

b. Physical properties test (4.5.3.1).

c. Vibration test (4.5.4.2).

4.3.4 Identification of samples. Samples for each dash number shall be separately packaged and forwarded to the testing facility specified by the qualifying agency (see 6.3). Samples shall be plainly identified by securely attached durable tags marked with the following information:

Sample for qualification test
Specification MIL-C-85052
CLAMP, LOOP, CUSHION
Specification sheet part number
Manufacturer's part number
Name of Manufacturer/Manufacturer's FSCM number
Submitted (date) under authorization (reference letter authorizing the test)

4.3.5 Test report. The contractor shall furnish the agency responsible for qualification with a certified test report, in duplicate, showing quantitative results for tests required by this specification. The report shall designate the specification sheet part number of the clamps submitted. The report shall also include the manufacturer's drawing specifying the dimensions of the clamp in the open and in the closed position, and the manufacturer of the cushion material.

4.4 Quality conformance inspection. Quality conformance inspection shall consist of the tests and inspections specified in Table II, conducted in accordance with 4.4.2. The Quality Conformance Test Report shall be in accordance with 6.2.1.

TABLE II. Quality conformance tests.

Examination and Tests	Requirement	Test	Inspection Level	AQL
Examination of product	3.4	4.5.2	I	(see Table III)
Clamp band hardness	3.5.2.1	4.4.3	S1	1.0
Cushion tensile	3.5.1.1	4.5.3.1	S1	1.0
Cushion elongation	3.5.1.1	4.5.3.1	S1	1.0
*Ozone resistance	3.5.3.3	4.5.4.3	S1	1.0

*This test may be waived by acquiring activity (see 6.2.d).

4.4.1 Inspection lot. An inspection lot shall consist of clamps for a particular size, and material produced under essentially the same manufacturing conditions and presented for inspection at the same time.

4.4.2 Sampling. A random sample shall be selected from each inspection lot in accordance with MIL-STD-105. The inspection level and Acceptable Quality Level (AQL) shall be as specified in Table II. Cushion material test specimens shall be cut from clamp cushions and shall be of sufficient size to be tested in accordance with the applicable test methods of the applicable specification sheet. Tensile and elongation cushion material test specimens may be cut from larger size clamp cushions of the same inspection lot and shall be provided by the manufacturer.

4.4.3 Clamp band hardness test. Samples from each heat treated lot of clamp bands (see 4.4.2) shall be tested in accordance with the Rockwell superficial hardness of ASTM E18. The clamp bands shall meet the requirements specified herein (see 3.5.2.1).

TABLE III. Classification of defects.

Test	MIL-STD-105, Inspection Level I AQL (Percent Defective)	
	Major	Minor
Examination of product	1.0	4.0
A. Dimensions (see applicable specification sheet)		
1. Clamp cushion		
a. Material thickness	X	
b. Inside width	X	
c. Color (see applicable specification sheet)	X	
2. Clamp bank		
a. Material thickness	X	
b. Width	X	
c. Bolt hole diameter		X
3. Clamp assembly		
a. Loop diameter "D" (see 4.5.4.1)		X
b. Centerline of loop to centerline of bolt hole "E"		X
B. Workmanship and marking		X

4.5 Test methods.

4.5.1 Test conditions.

4.5.1.1 Environment. Unless otherwise specified, all testing shall be done at room temperature ($60^{o}F$ - $90^{o}F$).

4.5.1.2 Test mandrels. Unless otherwise specified, all test mandrels shall be tool steel drill rod in accordance with ASTM A582. Unless otherwise specified, all dimensions shall be as specified in Table IV with surface texture of 32 microinches maximum. Spacing A and B shall be as shown in Figure 2.

TABLE IV.

Clamp Size	Mandrel		Clamp Spacing (see Figure 2)	
	Dia ± .001 Inches	Length ± .015 Inches	A Inches	B Inches
-2	.125	6.0		
-4	.250	17.5	6.0	2.75
-6	.375	21.0	8.0	2.5
-8	.500	23.0	9.0	2.5
-10	.625	25.0	10.0	2.5
-12	.750	29.0	12.0	2.5
-16	1.000	29.0	12.0	2.5
-20	1.250	22.5	2.75	8.5
-24	1.500	22.5	2.75	8.5

4.5.2 Examination of product. Clamps shall be carefully examined to determine compliance with the requirements of this specification and applicable specification sheet with respect to material, workmanship, configuration, marking and dimensions as specified in 3.4. Any variation beyond the dimensions, plus allowable tolerances, shall be classified as major or minor as indicated in Table III.

4.5.2.1 Examination of product (quality conformance testing). For quality conformance testing, examination of product shall consist of examining factors outlined in Tables II and III.

4.5.3 Clamp cushion tests.

4.5.3.1 Physical properties tests. Tests shall be conducted in accordance with the test methods shown in Table II of the applicable specification sheet. Cushion material samples shall meet specified requirements (see 3.5.1.1).

4.5.3.2 Compression set test. Three cushion material test samples shall be air aged at the temperature specified on the applicable specification sheet for 70 hours and tested in accordance with ASTM D395 Method "B." Cushion material samples shall meet the requirements specified in the applicable specification sheet (see 3.5.1.2).

4.5.3.3 Flammability test. The flammability tests shall be performed as specified below. The flame source shall be a Bunsen Burner or similar burner having a nominal tube internal diameter of 3/8 inch. The burner shall be adjusted to provide a 1-1/2 inch high flame of blue intensity. Verify flame temperature to be a minimum of 1550°F, at the center of the flame, with the use of a thermocouple.

4.5.3.3.1 Preconditioning. All specimens shall be preconditioned at 70° ± 5°F and 50 ± 5 percent relative humidity for a period of 24 hours prior to testing. Clamps used for the vertical burn test shall be uncurled until straight before being placed in the preconditioning chamber. The cushion shall not be removed from the clamp band.

4.5.3.3.2 Vertical burn test. Three size dash 16 clamps shall be used for the vertical burn test (see 4.5.3.3.1). Remove the specimens one at a time from the preconditioning chamber immediately before performing test. Slide the cushion to one end of the clamp band. Position the specimen in the vertical position with the centerline of the cushion material 3/4 inch above the top edge of the burner tube. Apply flame for 12 seconds and then remove. Testing shall be performed in a draft free environment. The average burn time of the three samples after removal of flame shall not exceed 15 seconds. The average burn length shall be less than the length of one of the specimens (cushion). Drippings from the burning specimens shall not continue to flame for more than five seconds after falling (see Figure 3).

4.5.3.3.3 Horizontal burn test. Three specimens fabricated in accordance with ASTM D3182 shall be used for the horizontal burn test. The specimens shall be removed one at a time from the preconditioning chamber and positioned so that the centerline of the edge being burned shall be 3/4 inch above the top edge of the burner tube. The flame shall be applied for 15 seconds and then removed. Permit a minimum of 1-1/2 inches to burn to calculate the burn rate. The burn rate shall not exceed 2-1/2 inches per minute. Record burn rate (see Figure 3).

4.5.3.4 Titanium compatibility test. Mount five -16 size clamps on a piece of titanium alloy tubing conforming to AMS 4944 with no spacer between the feet. The tubing with clamps mounted shall be filled with MIL-H-83282 fluid and exposed to the clamp maximum rated service temperature for 12 days. Pressure in the tube shall be maintained at 3000 psi during the 12 day exposure. The test apparatus shall be removed and placed in an atmosphere of 158°F and 95 percent relative humidity for 20 days. Performance requirements shall be as specified herein (see 3.5.1.4).

4.5.4 Clamp assembly tests.

4.5.4.1 Diametral retention test. Six clamps of each size (-4, -6, -8, -10, -12, -16, -20, -24) shall be subjected to this test, unless otherwise specified, both before and after the vibration test 4.5.4.2. The test clamp shall be installed on a clean, dry mandrel conforming to 4.5.1.2 (a shorter length may be used). Mount the clamp

with a 10-32 UNF-3A bolt, free running nut, and a .0625 ± .005 inch thick spacer between the clamp feet. Tighten the bolt to a 30 lbf-in. torque. The mandrel shall be slowly forced to slide longitudinally through the clamp as shown in Figure 1. The cushion shall not roll or slip off the band. The force to move the mandrel one inch shall be recorded. The clamps shall meet the requirements specified in 3.5.3.1.

4.5.4.2 Vibration and transmissibility test. Three clamps of each size shall be tested (-4, -6, -8, -10, -12, -16, -20, -24). Mount the clamps on a mandrel conforming to 4.5.1.2 with spacing and dimensions as specified in Table IV, and as shown in Figure 2. The assembly shall be installed on a vibration fixture and vibration table as shown in Figure 2. Clamps shall be mounted flat on the vibration fixture with 10-32 UNF-3A bolts (160 KSI or higher strength). A flat washer shall be used beneath the head of the mounting bolt with smooth edge against the clamp foot. An input measuring accelerometer shall be mounted on the vibration fixture adjacent to but not touching the center clamp (see Figure 2). A second output measuring accelerometer shall be mounted on the test mandrel adjacent to but not touching the center clamp (see Figure 2). The clamp shall be subjected to a simple harmonic motion having a vibratory acceleration of 2g thru a frequency range of 50 to 500 to 50 Hz. The sweep rate shall be logarithmic, requiring 5 minutes/cycle. One frequency cycle shall consist of 50 to 500 to 50 Hz. A resonance search shall be made and each resonance recorded (frequency and acceleration peak).

4.5.4.2.1 Transmissibility. Transmissibility Ratio (TR = g output/g input) shall be calculated for each resonance peak and recorded. The clamps shall then be dwelled at the most severe resonance peak for 30 minutes at a constant sinusoidal vibratory acceleration of 10g. All clamps shall meet the requirements specified herein (see 3.5.3.2). The vibration test shall be repeated with 3 new clamps of the same size as specified. Upon completion of vibration test, each clamp shall be subjected to the retention test as specified herein (see 4.5.4.1).

4.5.4.3 Ozone resistance test. (When specified on applicable specification sheet.) Five test clamps of size (-2) shall be mounted on a test mandrel conforming to 4.5.1.2. The mandrel with clamps installed shall be conditioned for 70 hours at 212°F and then immersed in an ozone environment of 600 parts per hundred million (PPHM) concentration for 6 hours at 125°F. Unless otherwise specified, tests shall be conducted in accordance with ASTM D1149. Clamps shall meet the requirements specified herein (see 3.5.3.3).

4.5.4.3.1 Ozone resistance test (quality conformance only). This test shall be conducted on clamps having cushions that are made from base materials that are prone to ozone attack. See specification sheet for an ozone resistance requirement. The ozone resistance test conducted for qualification testing (see 4.5.4.3) shall be conducted for quality conformance testing except that where clamps larger than size (-2) are

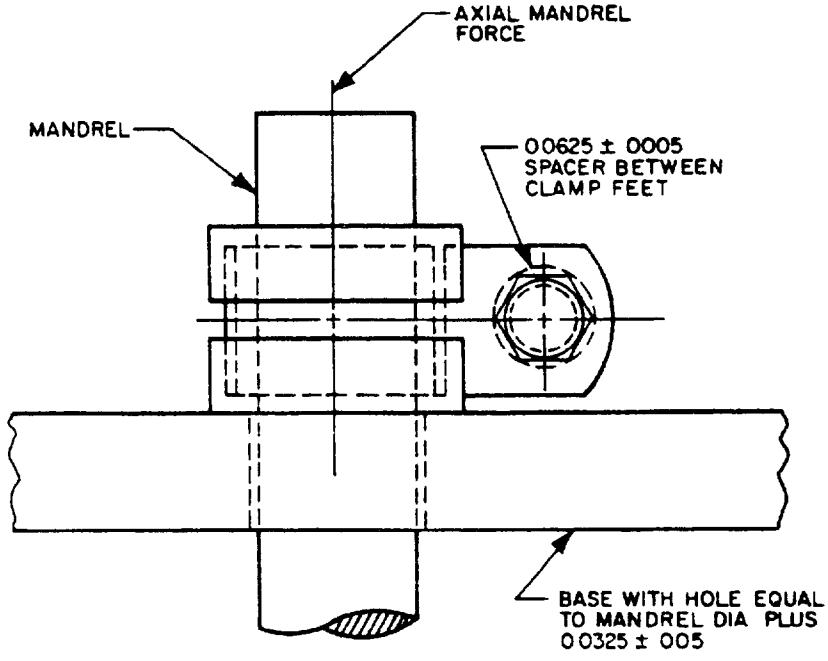

FIGURE 1.

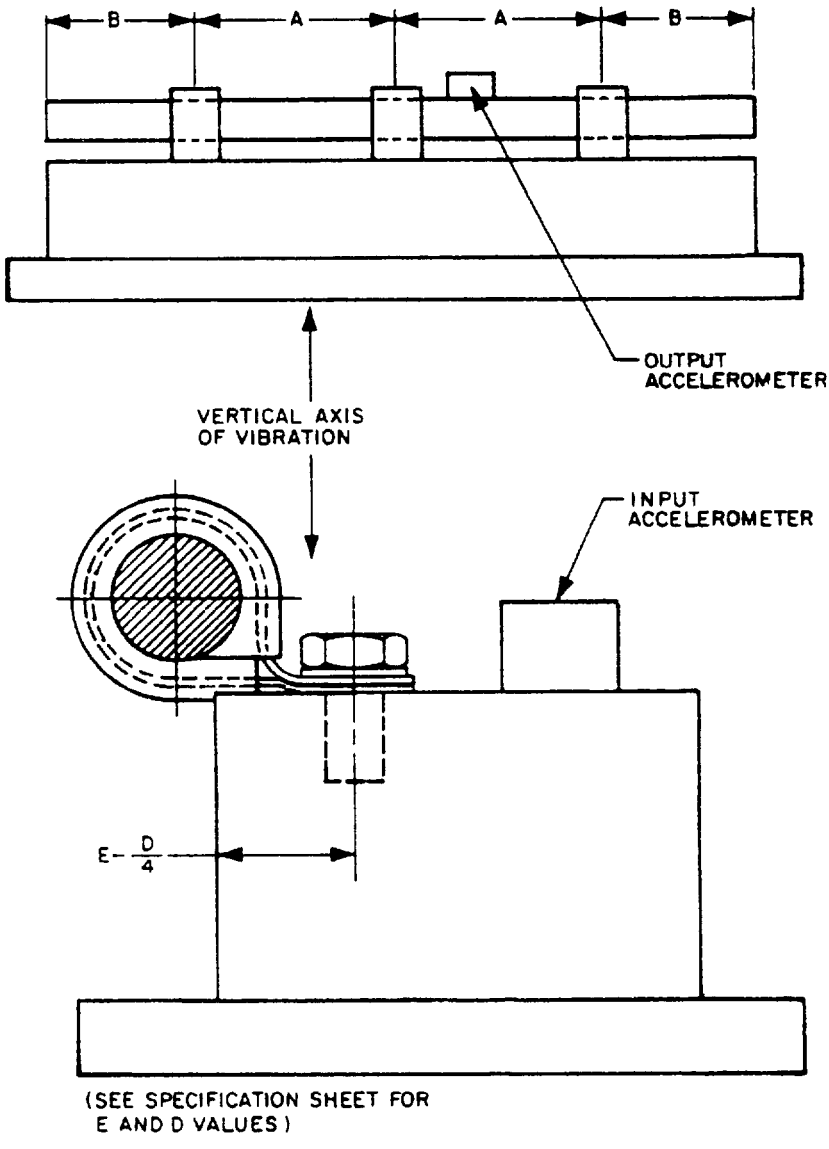

FIGURE 2.

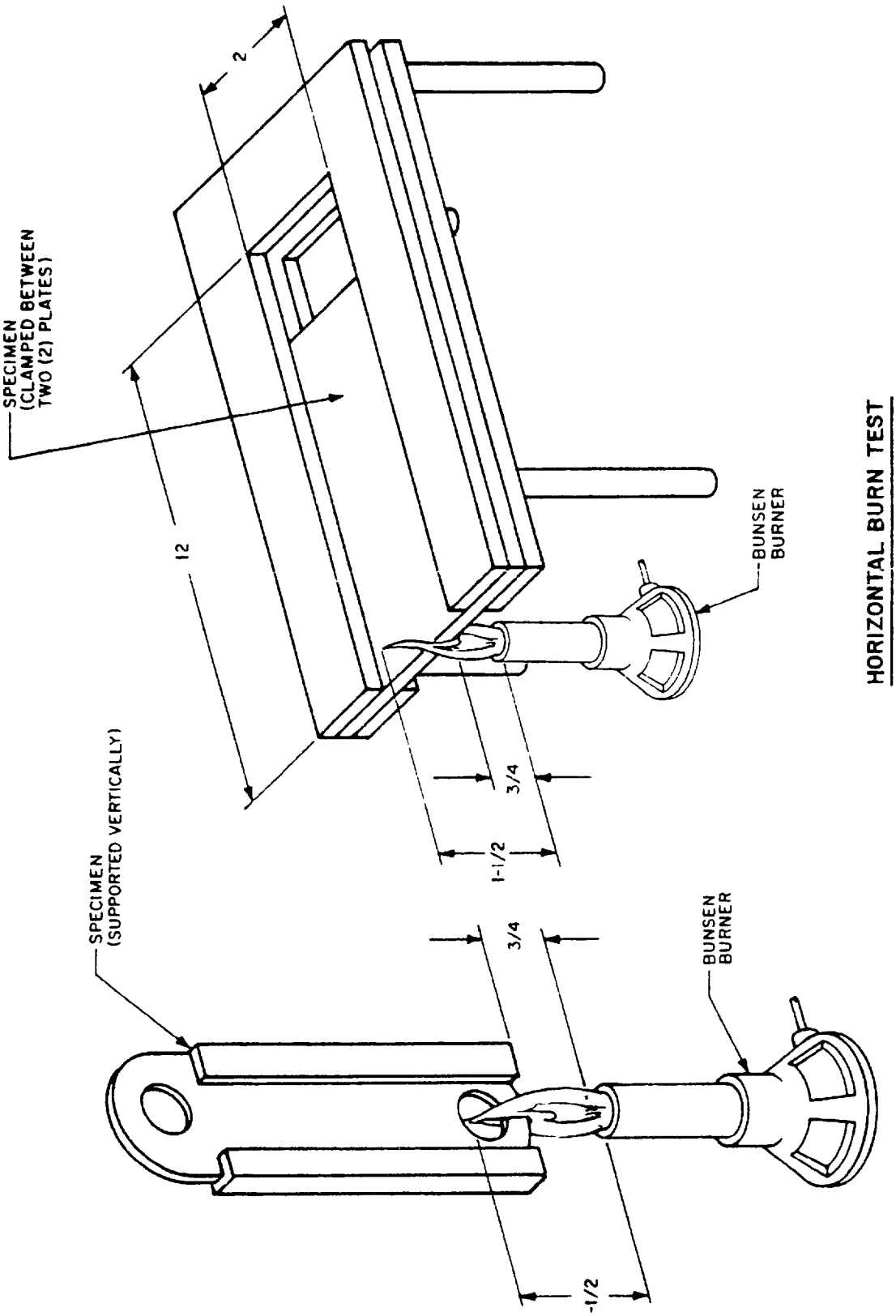

FIGURE 3. Flammability test set-up (typical)

being tested, the larger cushions shall be removed from the clamp band, cut and tested on a size (-2) band. This test may be waived by the acquiring activity if the acquirement order is less than 5000 total parts (see paragraph 6.2.d).

4.5.4.4 Thermal shock test. Five test clamps of size (-16) shall be mounted on a test mandrel conforming to 4.5.1.2. The mandrel with clamps installed shall be exposed to 5 cycles of 30 minutes exposure at -65°F, 15 minutes rest at room temperature, followed by 30 minutes exposure at the maximum rated service temperature (see applicable specification sheet). Clamps shall meet the requirements specified herein (see 3.5.3.4).

5. PACKAGING

5.1 Preservation and packaging. The clamps shall be preserved and packaged in accordance with industrial methods unless level A is specified (see 6.2).

5.1.1 Level A. Clamps shall be preserved and packaged in accordance with Method III of MIL-P-116. Unless otherwise specified, clamps of one size, type and class shall be packaged in multiples of 10, with a maximum of 100 per package. Unit containers shall conform to PPP-B-566, PPP-B-665, PPP-B-676 or PPP-B-636. Box closure shall be in accordance with the appendix to the applicable box specifications.

5.1.2 Industrial. Preservation and packaging shall be sufficient to afford physical protection against damage during shipment and handling from the supply source to the Government using activity for immediate use.

5.2 Packing. The clamps shall be packed in accordance with industrial methods unless level A or B is specified (see 6.2).

5.2.1 Levels A and B. Clamps packaged as described in 5.1 shall be packed in boxes conforming to any one of the following specifications for the level specified.

Specification	Type of Class	
	Level A	Level B
PPP-B-576	Class 2	Class 1
PPP-B-585	Class 2 or 3	Class 1
PPP-B-591	Class 2	Class 1
PPP-B-601	Overseas	Domestic
PPP-B-621	Class 2	Class 1
PPP-B-636	Weather Resistant	Domestic
PPP-B-640	Class 2	Class 1

Boxes shall be closed, strapped or banded in accordance with the applicable box specification or appendix thereto for level specified. Gross weight of wood, wood cleated, and triple wall boxes shall not exceed 200 pounds. Gross weight of PPP-B-636 boxes shall not exceed the weight limitation of the box specification.

5.2.2 Industrial. Clamps packaged as specified in 5.1 shall be packed in a manner to insure carrier acceptance and safe delivery at destinations. Containers shall conform to the rules and regulations applicable to the mode of transportation.

5.3 Marking. Marking of interior packages and exterior shipping containers shall be in accordance with MIL-STD-129.

6. NOTES

6.1 Intended use. The clamps are intended for use in general clamping of hydraulic tubing, electrical systems and rigid tubing. The clamps may be used within the cushion temperature classifications established (see applicable specification sheet).

6.2 Ordering data. Acquisition documents should specify the following:

a. Title, number and date of this specification.

b. Specification sheet part number (see specification sheet).

c. Applicable levels of preservation, packaging and packing (see Section 5).

d. On orders less than 5000 total parts of a single size, waiver of quality conformance ozone test (see 4.5.4.3.1).

6.2.1 Data requirements. When this specification is used in an acquisition which incorporates a DD Form 1423, Contract Data Requirements List (CDRL), the data requirements identified below shall be developed as specified by an approved Data Item Description (DD Form 1664) and delivered in accordance with the approved CDRL incorporated into the contract. When the provisions of DAR 7-104.9(n)(2) are invoked and the DD Form 1423 is not used, the data specified below shall be delivered by the contractor in accordance with the contract or purchase order requirements. Deliverable data required by this specification is cited in the following paragraphs.

Paragraph No.	Data Requirement Title	Applicable DID No.	Option
4.4	Quality Conformance Test Report	DI-R-4026	-

(Data item descriptions related to this specification, and identified in Section 6 will be approved and listed as such in DoD 5000.19L, Volume II, AMSDL. Copies of data item descriptions required by the contractors in connection with specific acquisition functions should be obtained from the Naval Publications and Forms Center or as directed by the contracting officer.)

6.3 Qualifications. With respect to products requiring qualification, awards will be made only for products which are at the time set for opening of bids, qualified for inclusion in the applicable Qualified Products List whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification, in order that they may be eligible to be awarded contracts or purchase orders for the products covered by this specification. The activity responsible for the Qualified Products List is the Naval Air Systems Command (AIR-53031B) Department of the Navy, Washington, DC 20361; however, information pertaining to qualification of products may be obtained from the Commanding Officer, Naval Air Development Center (6061), Warminster, PA 18974.

Custodians:
Navy - AS
Air Force - 99
Army - AV

Review activities:
Air Force - 11
DLA - IS

Preparing activity:
Navy - AS
(Project No. 5340-1564)

INSTRUCTIONS In a continuing effort to make our standardization documents better, the DoD provides this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge *(DO NOT STAPLE)*, and mailed. In block 5, be as specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous or was incompatible, and give proposed wording changes which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgement will be mailed to you within 30 days to let you know that your comments were received and are being considered.

NOTE This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification 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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MIL-C-85052A	CLAMP, LOOP, CUSHION, GENERAL SPECIFICATION FOR

3a NAME OF SUBMITTING ORGANIZATION	4 TYPE OF ORGANIZATION *(Mark one)*
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5 PROBLEM AREAS

a Paragraph Number and Wording

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c Reason/Rationale for Recommendation

6 REMARKS

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OF VALIDATION

MIL–C–85052A
NOTICE 1
26 September 1991

MILITARY SPECIFICATION

CLAMP, LOOP, CUSHION, GENERAL SPECIFICATION FOR

MIL–C–85052A, dated 30 May 1984, has been reviewed and determined to be valid for use in acquisition

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Air Force – 99

Preparing activity
Navy – AS

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