

MIL-A-19521A(SHIPS)
 AMENDMENT - 3
 15 AUGUST 1967
 SUPERSEDING 1/
 Amendment - 2
 26 February 1963

MILITARY SPECIFICATION

ANODES, CORROSION PREVENTIVE, ZINC, AND PLUGS, ZINC ANODE RETAINING:
 DESIGN OF AND INSTALLATION IN SHIPBOARD CONDENSERS AND HEAT EXCHANGERS

This amendment forms a part of Military Specification MIL-A-19521A(SHIPS), dated 30 January 1961.

0 Page 1, paragraph 2.2: Delete and substitute:

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

NATIONAL BUREAU OF STANDARDS PUBLICATION
 Handbook H28 - Screw Thread Standards for Federal Services.

(Application for copies should be addressed to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.)

UNIFORM FREIGHT CLASSIFICATION COMMITTEE
 Uniform Freight Classification Rules

(Application for copies should be addressed to the Uniform Classification Committee, 202 Union Station, 516 West Jackson Boulevard, Chicago, Illinois 60606.)

0 AMERICAN SOCIETY FOR TESTING MATERIALS

- B61 - Steam or Valve Bronze Castings.
- B122 - Copper-Nickel-Zinc Alloy (Nickel Silver) and Copper-Nickel Alloy Plate, Sheet, Strip, and Rolled Bar.
- B143 - Tin Bronze and Leaded Tin Bronze Sand Castings.
- B150 - Aluminum Bronze Rod, Bar and Shapes.
- B164 - Nickel Copper Alloy Rod and Bar.

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

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

Page 2, paragraph 3.1, third line: Delete "Bureau of Ships" and substitute "Naval Ship Engineering Center".

0 Page 2, paragraph 3.1.2, line 9: Delete "requirments" and substitute "requirements".

Page 2, paragraph 3.1.3.1.3: Delete last sentence and substitute: "The number of discs per pencil shall be suited to the installation, but shall not exceed seven."

Page 2, paragraph 3.1.3.2.3: Delete third sentence and substitute: "The number of discs per pencil shall be suited to the installation, but shall not exceed seven."

1/ CHANGES FROM PREVIOUS ISSUE. THE OUTSIDE MARGINS OF THIS DOCUMENT HAVE BEEN MARKED "1/" TO INDICATE WHERE CHANGES (DELETIONS, ADDITIONS, ETC.) FROM THE PREVIOUS ISSUE HAVE BEEN MADE. THIS HAS BEEN DONE AS A CONVENIENCE ONLY AND THE GOVERNMENT ASSUMES NO LIABILITY WHATSOEVER FOR ANY INACCURACIES IN THESE NOTATIONS. BIDDERS AND CONTRACTORS ARE CAUTIONED TO EVALUATE THE REQUIREMENTS OF THIS DOCUMENT BASED ON THE ENTIRE CONTENT AS WRITTEN IRRESPECTIVE OF THE MARGINAL NOTATIONS AND RELATIONSHIP TO THE LAST PREVIOUS ISSUE.

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Page 4, table II: Delete and substitute:

"Table II - Class B material.

Material	Specification
Copper-nickel alloy, alloy 5 (70-30);	ASTM-B122
Copper-nickel alloy, composition 90-10;	MIL-C-15726
Gun metal, alloy 1B;	ASTM B-143
Valve bronze;	ASTM B61
Aluminum bronze, wrought, alloy 3, stress relieved.	ASTM B150

Pages 5 and 6, figures 3 and 4: Delete and substitute the attached figures.

Page 7, paragraph 4.1: Delete and substitute:

"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, the supplier may utilize his own facilities or any commercial laboratory acceptable to 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."

Page 8, Figure 6, Number "1." below chart: Delete "francional" and substitute "fractional".

Page 8, paragraph 4.2: Delete and substitute:

"4.2 Sampling for quality conformance inspection.-".

Page 8, paragraph 4.2.1, last line: Delete "acceptance".

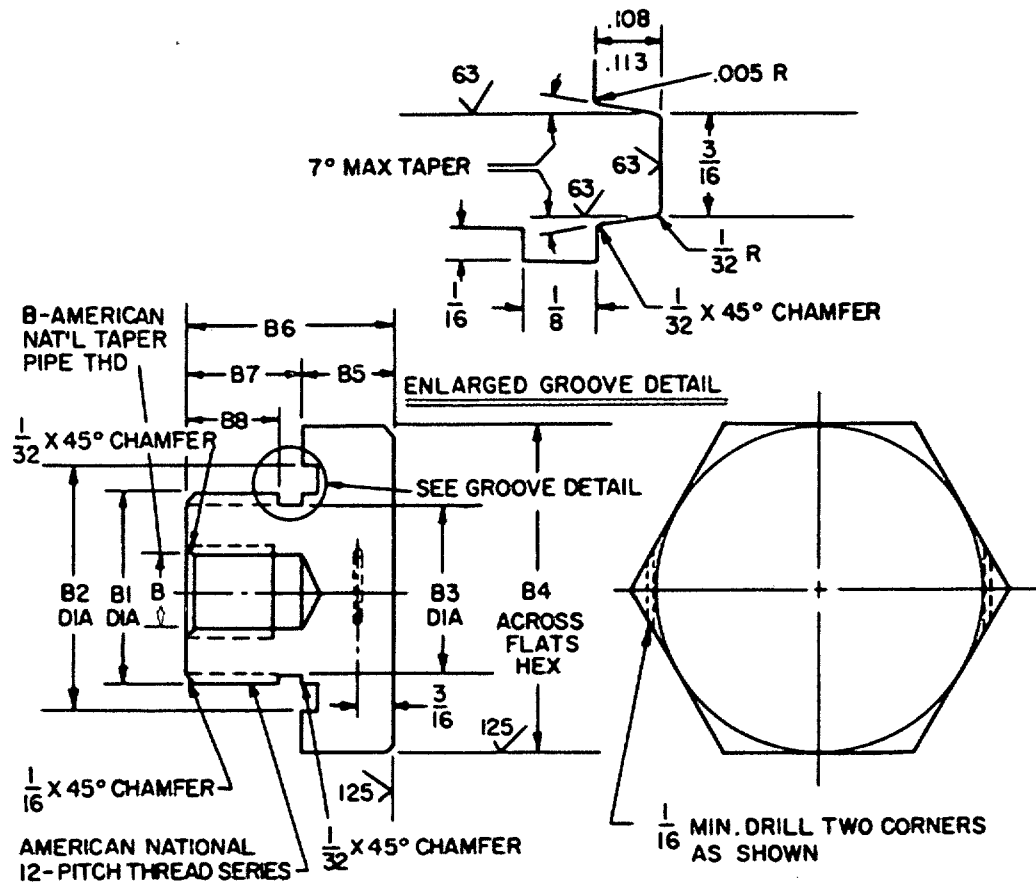
Page 9, paragraph 4.3.1, last sentence: Delete and substitute: "Any plug in the sample containing one or more visual defects shall not be offered for delivery, and if the number of defective plugs in any sample exceeds the acceptance number for that sample, this shall be cause for rejection of the lot represented by the sample."

Page 9, paragraph 4.3.2, last sentence: Delete and substitute: "Any sample plug which does not meet the dimensional requirements shall not be offered for delivery, and if the number of nonconforming plugs in any sample exceeds the acceptance number for that sample, this shall be cause for rejection of the lot represented by the sample."

Page 9, paragraph 4.4, last sentence: Delete and substitute: "Any sample plug which does not pass the required hydrostatic test shall not be offered for delivery, and if the number of nonconforming plugs in any sample exceeds the acceptance number for that sample, this shall be cause for rejection of the lot represented by the sample."

Page 10, delete "Notice" paragraph.

Preparing activity:
Navy - SH
(Project 5340-N009)



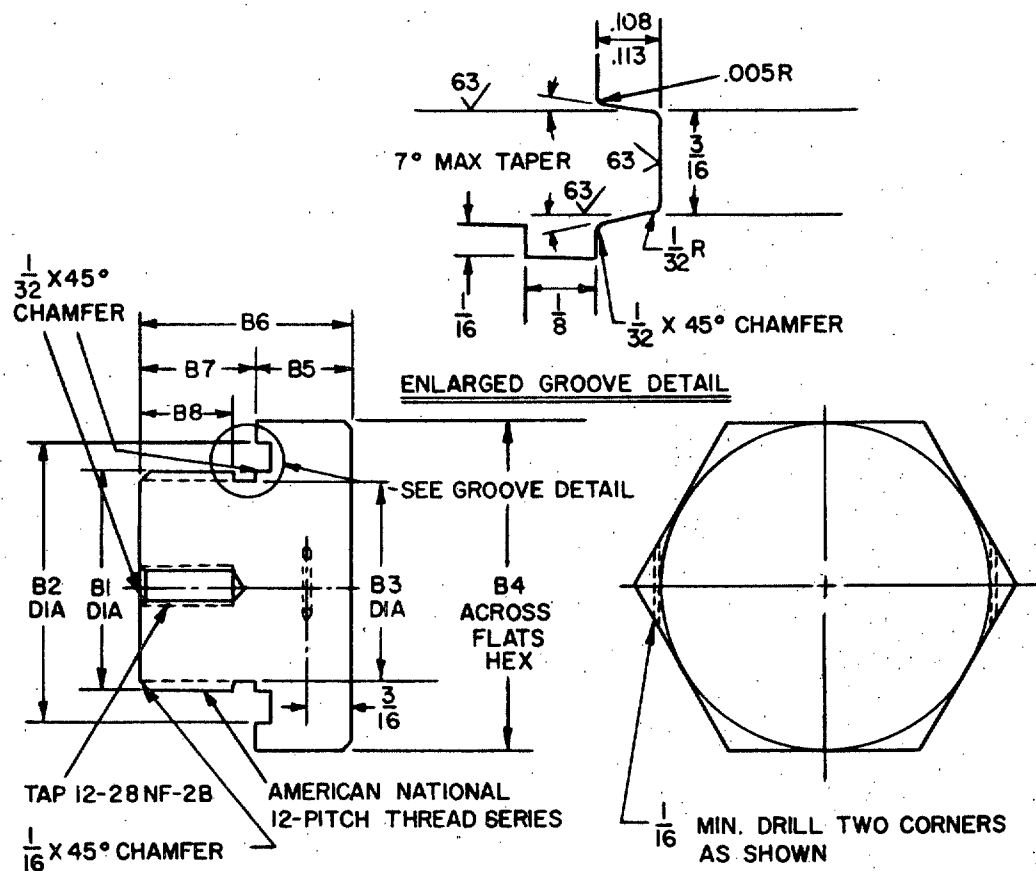
SOLID ZINC PENCIL		B	B1	B2	B3	B4	B5	B6	B7	B8
IPS	OD									
3/8	0.675	3/8	1 1/16 - 12 UN-2	7/16	15/16	1 1/16	1/2	1 1/8	5/8	1/2
1/2	0.840	1/2	1 5/16 - 12 UN-2	1 1/16	1 3/16	1 5/16	1/2	1 3/8	7/8	3/4

1. ALL FRACTIONAL DIMENSIONS TO HAVE A TOLERANCE OF $\pm \frac{1}{64}$.
2. DIMENSIONS ARE IN INCHES.

SH5230

Figure 3 - Class A, type I support plug for 2RN anode.

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ZINC COUPON	B1	B2	B3	B4	B5	B6	B7	B8
DIAMETER	EXTERNAL THD							
0.825	$\frac{1}{16}$ - 12 UN-2	$\frac{7}{16}$	$\frac{15}{16}$	$\frac{11}{16}$	$\frac{1}{2}$	$\frac{1}{8}$	$\frac{5}{8}$	$\frac{1}{2}$
1.050	$\frac{5}{16}$ - 12 UN-2	$\frac{11}{16}$	$\frac{3}{16}$	$\frac{15}{16}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{3}{4}$

1. ALL FRACTIONAL DIMENSIONS TO HAVE A TOLERANCE OF $\pm \frac{1}{64}$.
2. DIMENSIONS ARE IN INCHES.

SH 5231

Figure 4 - Class A, type II support plug for ZDM anode