INCH-POUND
MIL-A-18001J
AMENDMENT 2
13 March 1989
SUPERSEDING
AMENDMENT 1
7 December 1987

MILITARY SPECIFICATION

ANODES, CORROSION PREVENTIVE, ZINC; SLAB DISC AND ROD SHAPED

This amendment forms a part of MIL-A-18001J, dated 25 November 1983, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 3

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 specified, the issues of the documents which are DoD adopted shall be those listed in the issue of the DoDISS specified in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS shall be the issue of the nongovernment documents which is current on the date of the solicitation.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

A 36 - Standard Specification for Structural Steel. (DoD adopted)

D 3951 - Standard Practice for Commercial Packaging. (DoD adopted)

E 290 - Standard Test Method for Semi-Guided Bend Test for Ductility of Metallic Materials. (DoD adopted)

E 536 - Standard Method for Chemical Analysis of Zinc and Zinc Alloys.

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

(Nongovernment standards and other publications are normally available from the organizations which prepare or which distribute the documents. These documents also may be available in or through libraries or other informational services.)"

AMSC N/A FSC 5340

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* 3.1.3: Delete and substitute:

"3.1.3 Brass straps. Type ZHB zinc anodes shall have brass strap cores conforming to alloy 482 of QQ-B-639 or phosphor bronze straps conforming to composition A of QQ-B-750. The brass or Bronze straps shall be coated with zinc to a minimum thickness of 0.0005 inch. Lack of adhesion of the zinc coating at bend or absence of zinc coating at cut edges will not be cause for rejection of fabricated anodes. Cracks in the base metal shall be cause for rejection. The maximum copper content in the zinc, as specified in table I, may be increased to 0.020 percent for type ZHB anodes."

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* 3.5.2: Delete and substitute:

"3.5.2 Each anode shall be cast or die-stamped with the following: manufacturer's symbol, unique heat number, and capital letter corresponding to the revision letter of the military specification to which the anode conforms."

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* 4.2.1: Delete and substitute:

"4.2.1 Lot. For the purpose of sampling, a lot shall consist of all zinc anodes of the same class and type, poured or cast from one homogeneous heat or melt of a single charge of raw materials. The addition of any material to the heat or melt at any time constitutes a new lot."

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* 4.2.4.6, fourth sentence: Delete.

* 4.2.5: Delete and substitute:

"4.2.5 Sampling for physical testing. At least five type ZRN anodes and five type ZPN anodes shall be selected at random from a lot. Type ZRN anodes shall conform to the tests specified in 4.4.5. Type ZPN anodes shall conform to the tests specified in 4.4.5.1."

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* 4.4.2.4: Delete and substitute:

"4.4.2.4 Sample anodes shall be discarded and not included in the delivery of material after the core bond tests are performed. The remaining lengths of ZRN and ZPN anodes may be included in the delivery of material after the physical tests of 4.4.5. Sampling for chemical analysis specified in 4.2.4 shall be made prior to discarding the anodes specified in 4.4.2.1 through 4.4.2.3."

* 4.4.5.1, line 3: Add: "Type ZPN anodes, selected in accordance with 4.2.5, shall be bent 45 degrees around a mandrel that has a diameter of three times the thickness of ZPN type anodes.".

* 4.4.5.1, line 5: Delete: "at 10X magnification.".

PAGE 11

5.1: Delete and substitute:

"5.1 Preservation. Preservation shall be level A, C and commercial as specified (see 6.2)."

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5.1.2: Delete and substitute:

"5.1.2 Level C. The zinc anodes shall be preserved as specified for level A, except that non-weather resistant domestic grade fiberboard boxes may be used."

5.1.3: Add as new paragraph:

"5.1.3 Commercial. Anodes shall be preserved in accordance with ASTM D 3951."

5.2, line 1: Delete "C" and substitute "commercial".

5.2.1: Delete and substitute:

"5.2.1 Level A. Anodes, segregated for type, size, and heat, shall be packed in accordance with 5.2.1.1 through 5.2.1.4."

5.2.2: Delete and substitute:

"5.2.2 Level B. Anodes, segregated for type, size, and heat, shall be packed in accordance with 5.2.2.1 through 5.2.2.4."

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5.2.3: Delete and substitute:

"5.2.3 Commercial. Zinc anodes that require overpacking for shipment shall be packed in accordance with ASTM D 3951."

5.3: Delete and substitute:

"5.3 Marking. In addition to any special marking required by the contract or order (see 6.2), level A, B and C packs, pallet loads and shipping containers shall be in accordance with MIL-STD-129. Commercial packs, pallet loads and shipping containers shall be marked in accordance with ASTM D 3951."

FIGURE 10: Delete and substitute.

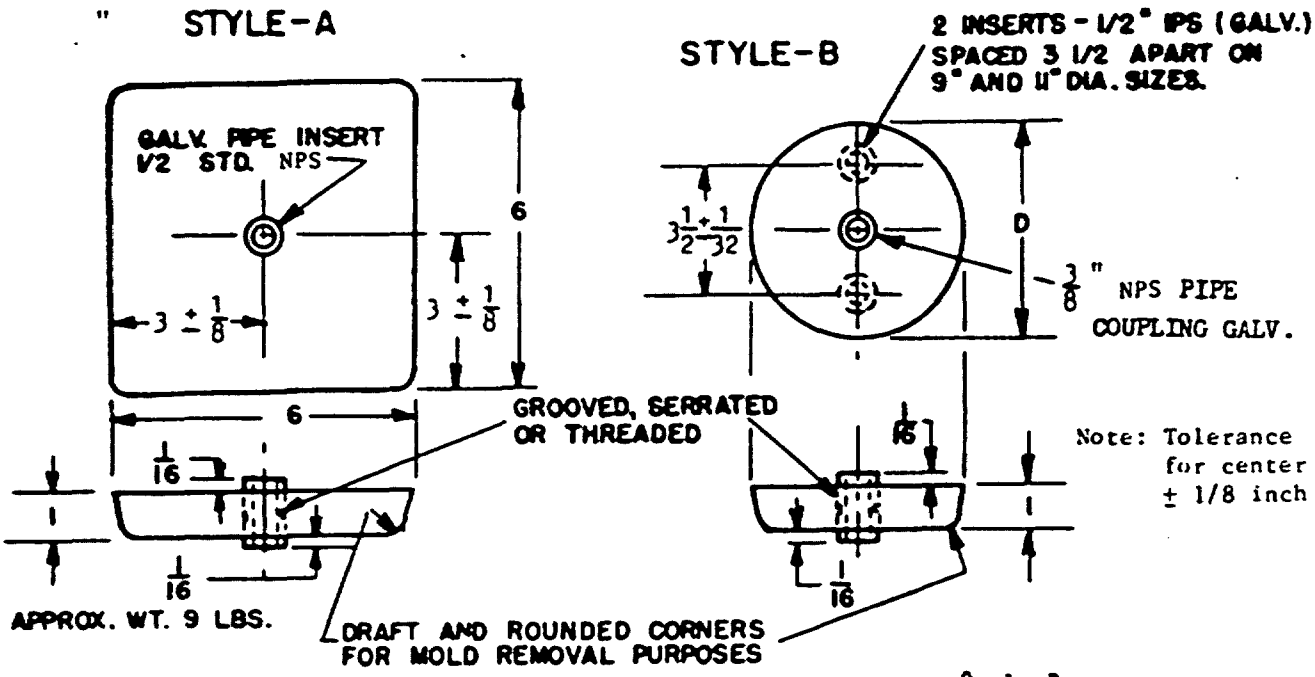
NOTE: The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

Custodians:
Army - AR
Navy - SH
Air Force - 99

Review activities:
Army - CE, AT
Navy - YD
DLA - IS

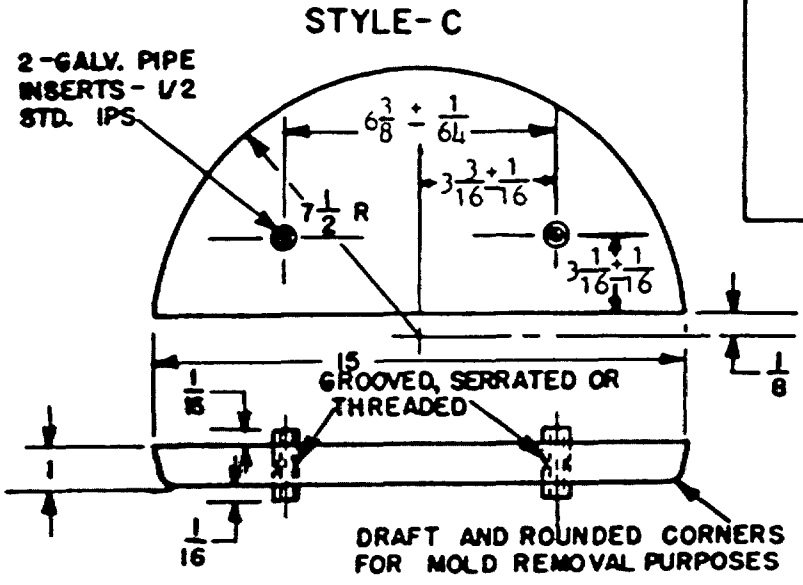
User activities:
Army - ME
Navy - OS

Preparing activity:
Navy - SH
(Project 5340-1917)



Style B

D - Diameter in inches ± 1/8	Approximate Weight (pounds)	Surface area (in^2)
11	24	130
9	16	92
6	7.1	47
5	4.9	36
4	3.19	26
3	1.78	16
2	0.79	9



Style A - Square slab
Style B - Circular slab
Style C - Semi-circular slab

SH 959

Approximate weight 23 pounds.

NOTES:

1. All dimensions are in inches.
2. Tolerance other than as shown will be plus or minus 1/8.

FIGURE 10. ZEP heat exchanger slab."