

MIL-D-43738B  
AMENDMENT-1  
1 February 1988

MILITARY SPECIFICATION

DISPENSER, CARBONATED BEVERAGE, MECHANICALLY REFRIGERATED

This amendment forms a part of Military Specification MIL-D-43738B dated 19 June 1984, and is approved for use by all department and Agencies of the Department of Defense.

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2.1, under "STANDARDS MILITARY": Add

"MIL-STD-167/1 - Mechanical Vibration of Shipboard Equipment (Type I - Environmental and Type II - Internally Excited).

MIL-STD-1472 - Human Engineering Design Criteria for Military Systems, Equipment and Facilities."

PAGES 3 and 4

3.3, 3.3.1, 3.3.1.1, 3.3.2, and 3.3.2.1: Delete and substitute:

3.3 Standard compliance. Unless otherwise specified herein, the dispensers shall conform to the applicable requirements of National Sanitation Foundation (NSF) Standard No. 18, and Underwriter's Laboratories (UL) Standard No. 471. Satisfactory evidence that these requirements have been met shall be submitted to the contracting officer or his authorized representative prior to the start of production (see 4.5).

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Add the following paragraphs:

"3.5.4 Inclined operation. When specified for shipboard use (see 6.2), carbonated beverage dispensers shall operate satisfactorily when inclined at an angle of 15 degrees each side of the vertical in each of two vertical planes at right angles to each other, with no spillage of fluid or product when tested as specified in 4.6.1.4.

AMSC N/A

FSC 7310

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3.5.5 Environmental suitability. When specified for shipboard use (see 6.2), carbonated beverage dispensers shall be capable of withstanding the ship's vibration and motion. Controls, switches, moving parts and electrical circuits shall operate under shipboard conditions without malfunction, binding, excessive looseness, or damage when tested as specified in 4.6.1.5.

3.5.6 Human factors criteria (for Navy use only). Human factors engineering criteria, principles and practices, as defined in MIL-STD-1472, shall be incorporated into the design of the carbonated beverage dispensers. The equipment shall be designed such that all maintenance and operational activities shall permit safe and efficient performance by the 5th percentile female to the 95th percentile male as defined in MIL-STD-1472. Sufficient clearance or free area shall be provided around an item so that an individual with applicable body dimensions and physical capabilities can safely operate, maintain, remove, or replace that item. When establishing accessibility requirements, both physical and visual access must be provided along with access for any tools or test equipment. All controls or switches needed for operation or maintenance shall be selected and integrated into the machines so as to meet the applicable requirements of MIL-STD-1472. When inspecting for defects and performing tests, the equipment shall adhere to the human factors engineering consideration listed herein."

3.6: Delete and substitute:

"3.6 Data-name plate. The beverage dispenser shall be furnished with a data name plate in accordance with the applicable requirements of MIL-STD-130 except the requirements for; (a) Methods of applying, (b) Identification tags, (c) Information not required and (d) Optional marking information shall not apply. The data plates shall be made of minimum 20 gauge (0.035 inch) corrosion-resisting metal and attached to the dispenser by rivets, screws or welding in such a manner as to meet the applicable National Sanitation Foundation sanitary requirements for this equipment. The plate shall contain the following information which shall be stamped, engraved, or applied by photosensitive means:

National Stock Number  
Procurement Contract Number  
Specification Data  
Manufacturer's Name, Address and Telephone Number  
Supplier's Name, Address and Telephone Number (List only if different from  
Manufacturer)  
Manufacturer's Model Number  
Government Approved Manual Number (See 6.2)

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Each plate shall be placed so that it is readily visible to the operator during normal operating use and so as to not adversely affect the life and utility of the beverage dispenser."

3.7, line 4: Delete "(see 4.6.1.3)" and add the following:

"When specified for shipboard use, the requirements and test limits of class A4 for surface ships and class A5 for submarines of MIL-STD-461 shall apply. Shipboard equipment shall meet the emission and susceptibility requirements for CEO1, CEO3, and REO2 (see 4.6.1.3)."

Add the following new paragraph:

"4.1.1 Responsibility for compliance. All items must meet all requirements of sections 3 and 5. The inspection set forth in this document shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the document shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling in quality conformance does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to acceptance of defective material."

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TABLE I: Delete last defect entry for "Marking identification" in its entirety, and add the following in their respective columns:

"Data-name plate	Omitted or not as specified	Minor
	Information incomplete or not legible	Minor
	Not located so as to be readily visible to the operator	Minor"

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4.5: Delete and substitute:

"4.5 Code and standard compliance. Certifications, certified test reports, or listing marks for codes and standards, as applicable, submitted in accordance with 3.3, shall be examined and validated as proof of compliance.

4.5.1 National Sanitation Foundation (NSF). Acceptable evidence of meeting the applicable requirements of the National Sanitation Foundation standard specified in 3.3 shall be one of the following:

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- a. A listing in the current edition of the National Sanitation Foundation (NSF) "Listing of Food Service Equipment", and display of the NSF seal on the finished beverage dispenser.
- b. A certification for the beverage dispenser issued by NSF under their special one-time contract evaluation/certification service.
- c. A certified test report acceptable to the contracting officer with the advice of the Army Surgeon General, from an independent testing laboratory, indicating that the beverage dispenser has been tested and conforms to the specified NSF standard.

4.5.2. Underwriter's Laboratories, Inc. (UL). Acceptable evidence of meeting the applicable requirements of UL Standard No. 471 shall be the UL label, a UL listing mark, or a certified test report from a recognized independent testing laboratory acceptable to the Government, indicating that the beverage dispenser has been tested and conforms to the applicable requirements of UL Standard No. 471."

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4.6.1.3, line 8: Add the following:

"When required for shipboard use, the unit shall be tested by the contractor in accordance with test methods CEO1, CEO3 and REO2 of MIL-STD-462."

Add the following new paragraphs:

"4.6.1.4 Inclined operational test. Position the carbonated beverage dispenser with the base set at an angle of 15 degrees, then operate the carbonated beverage dispenser for 30 seconds at each side of the vertical in each of two vertical planes at right angles to each other. At each of these positions observe for conformance with specified requirements in 3.5.4. For the test, the carbonated beverage dispenser shall be in fully operational state.

4.6.1.5 Shipboard environmental test. The carbonated beverage dispenser, under normal operating conditions, shall be tested in accordance with MIL-STD-167/1, Type I equipment. The carbonated beverage dispenser shall be secured to the test machine in the same manner that it will be secured on shipboard (see 3.5.2.1). Failure of the carbonated beverage dispenser to perform its function during and after testing or to meet the requirements of 3.5.5 shall constitute failure of this test."

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6.2 Add the following:

"p. When the beverage dispenser is required for shipboard use (see 3.5.4 and 3.5.5).

q. Government approved manual number to be included on data-name plate (see 3.6)."

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Add the following new paragraph:

"6.5.1 Technical manuals. The requirement for technical manuals should be considered when this document is cited on a contract. If technical manuals are required, a contract exhibit must be prepared to fully describe statement of work criteria and delivery instructions, and cite the applicable technical manual. The technical manuals must be acquired by separate Contract Line Item Number (CLIN) in the contract."

Custodians:

Army - GL  
Navy - YD  
Air Force - 99

Preparing activity:

Army - GL  
Project No. 7310-0747

Review activities:

Army - MD, TS  
Navy - MC, MS, SH  
Air Force - 84  
DLA - GS

User activity:

Army - CE