

INCH-POUND

MIL-PRF-2939G

20 July 2001

SUPERSEDING

MIL-C-2939F(SH)

31 December 1990

## PERFORMANCE SPECIFICATION

### COOLING COILS, AIR, DUCT TYPE AND GRAVITY TYPE, NAVAL SHIPBOARD ENVIRONMENTAL CONTROL SYSTEMS

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 duct type and gravity type air cooling coils for use in Naval shipboard environmental control systems.

1.2 Classification. Air cooling coils are of the following classes, sizes, and compositions, as specified (see 6.2).

Class 1 - Chilled water (DW), duct mounted  
Class 3 - Chilled Water (GW), gravity

Sizes: Class 1 - 61-68  
Class 3 - 1G, 3G, 5G

Composition M - Magnetic  
N - Nonmagnetic

#### 2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

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, ATTN: SEA 05Q, 1333 Isaac Hull Avenue SE Stop 5160, Washington Navy Yard DC 20376-5160 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 4130

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

## 2.2 Government documents.

### 2.2.1 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

##### DEPARTMENT OF DEFENSE

MIL-S-901	Shock Tests HI (High Impact); Shipboard Machinery, Equipment, and Systems, Requirements for
MIL-STD-167-1	Mechanical Vibrations of Shipboard Equipment, (Type I - Environmental and Type II - Internally Excited)
MIL-STD-2142	Magnetic Silencing Characteristics, Measurement of

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Standardization Documents Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

### 2.2.2 Other Government documents, drawings, and publications.

The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

#### PUBLICATIONS

NAVSEA TECHNICAL PUBLICATION S9074-AR-GIB-010/278 - Requirements for Fabrication, Welding and Inspection, Casting Inspection and Repair for Machinery, Piping and Pressure Vessels

(Unless otherwise indicated, copies of the above publication are available from the Naval Publications and Forms Center, Standardization Documents Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

#### DRAWINGS

NAVSEA drawing 803-6397313	Cooling coils, air, class I, duct mounted, chilled water, sizes 61 through 66
NAVSEA drawing 803-6397314	Cooling coils, air, class I, duct mounted, chilled water, sizes 67 and 68
NAVSEA drawing S3803-532636	Gravity Coils, sizes 1, 2, and 3

(These drawings may be obtained from: Commander, Portsmouth Naval Shipyard, Naval Engineering Drawing Support Activity, Code 202.2 Portsmouth, NH 03804-5000.)

2.3 Non-government publications. The following document(s) 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).

AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)

410            Forced Circulation Air Cooling and Air Heating Coils.

(Application for copies should be addressed to the Air Conditioning and Refrigeration Institute, 1501 Wilson Boulevard, Suite 600, Arlington, VA 22209.)

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS, INC. (ASHRAE)

25            Methods of Testing for Forced connection and Natural  
                 Convection Air Louvers for Refrigeration  
33            Methods of Testing Forced Circulation Air Cooling and Air  
                 Heating Coils

(Application for copies should be addressed to the American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc., 1791 Tullie Circle NE, Atlanta, GA 30329.)

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

Boiler and Pressure Vessel Code  
Section VIII, Division 1 - Pressure Vessels

(Application for copies should be addressed to the American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017.)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM F 593    Standard Specification for Stainless Steel Bolts, Hex  
                 Cap Screws, and Studs. (DoD adopted)  
ASTM F 594    Standard Specification for Stainless Steel Nuts. (DoD  
                 adopted)  
ASTM F 1166   Standard Practice for Human Engineering Design for  
                 Marine Systems, Equipment and Facilities

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