

MIL-F-50054 (Cm1C)

29 June 1959
(See section 6)

MILITARY SPECIFICATION

FILTER, GAS AND PARTICULATE, 5000 CFM, M17

1. SCOPE

1.1 This specification covers a gas and particulate filter for use in removing toxic gases and aerosols from the air forced or drawn through the filter.

2. APPLICABLE DOCUMENTS

2.1 Government documents. The following documents, of the issue in effect on date of invitation for bids, form a part of this specification:

SPECIFICATIONS

FEDERAL

- NN-P-530 - Plywood, Flat Panel.
- TT-E-527 - Enamel, Synthetic, Lustreless.

MILITARY

- MIL-C-104 - Grates, Wood; Lumber and Plywood Sheathed, Nailed and Bolted.

STANDARDS

MILITARY

- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
- MIL-STD-129 - Marking for Shipment and Storage.

FSC 4240

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DRAWINGS

CHEMICAL CORPS

B5-19-2006 - Filter, Gas and Particulate, 5000 CFM, M17 -
Bill of Material.

(Copies of specifications, standards, drawings and publications required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer)

2.2 Other publications. The following document forms a part of this specification. Unless otherwise indicated, the issue in effect on date of invitation for bids shall apply:

CONSOLIDATED CLASSIFICATION COMMITTEE

Uniform Freight Classification Rules

(Application for copies of these freight classification rules should be addressed to the Consolidated Classification Committee, 202 Chicago Union Station, Chicago 6, Ill.)

3. REQUIREMENTS

3.1 Materials and components.

3.1.1 Materials. All materials cited on Drawing B5-19-2006 or on the subsidiary drawings shall conform to the specifications listed thereon or to the specific characteristics set forth on the drawings.

3.1.2 Components. All components of the item shall conform to the specifications and drawings listed on Drawing B5-19-2006 and subsidiary drawings.

3.2 Manufacture and assembly. The filter shall be manufactured, assembled and marked as shown on Drawing B5-19-2006 and subsidiary drawings, which are listed on Drawing B5-19-2006.

3.3 Workmanship. The filter shall be free from contamination (foreign matter), defects or damage that might impair its use.

4. QUALITY ASSURANCE PROVISIONS

4.1 Supplier's responsibility. Unless otherwise specified herein the supplier is responsible for the performance of all inspection requirements prior to submission for Government inspection and acceptance. Except as otherwise specified, the supplier may utilize his own facilities or any

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commercial laboratory acceptable to the Government. Inspection records of the examination and tests shall be kept complete and available to the Government as specified in the contract or order.

4.2 Objective evidence. The supplier shall present objective evidence as required by the Government representative that all materials and components are in accordance with 3.1 and section 5 (see 6.3).

4.3 Alternate inspection (including testing) procedures. The supplier may utilize any alternate inspection procedures which will assure equal or better quality by submitting a written proposal with justification and obtaining written approval from the Government prior to its institution. In case of dispute, the procedures of this specification will govern.

4.4 Inspection provisions.

4.4.1 Lotting. A lot shall consist of the filters produced by one manufacturer from the same materials and under essentially the same manufacturing conditions. However, not more than one lot of C24 5000 cubic feet per minute (c.f.m.), gas filters and one lot of C20 5000 c.f.m., particulate filters shall be represented in any one lot of M17 filters.

4.4.2 Sampling. Sampling for nondestructive inspection shall be conducted in accordance with Standard MIL-STD-105. The level and degree of inspection shall be specified in the contract.

4.4.3 Nondestructive examination. The regular production lot shall be inspected in accordance with the classification of defects and Standard MIL-STD-105.

4.4.4 Classification of defects.

4.4.4.1 Filter, gas and particulate, 5000 c.f.m., M17 - assembly.
(Dwg. D5-19-2016)

Categories and defects

Major

AQL 1.0 percent defective

1. Component missing or incorrectly assembled
2. Damage affecting functioning
3. Adhesive material incorrectly applied
4. Marking incorrect

Minor

AQL 2.5 percent defective

51. Contamination
52. Coating missing, inadequate or incorrect
53. Marking missing or illegible

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4.4.4.2 Preparation for delivery. (section 5)Categories and defects.Major

AQL 4.0 percent defective

1. Inlet and outlet openings of the filter not covered as specified
2. Crate type, class or style incorrect
3. Anchoring, blocking or bracing of filter to crate base missing
4. Marking incorrect, missing or illegible

5. PREPARATION FOR DELIVERY

5.1 Packing.

5.1.1 Level A. The inlet and outlet openings of the filter shall be covered with 48 inch square sheets of 1/4-inch thick, exterior type, grade A-B, flat panel Douglas fir plywood, conforming to Specification NN-P-530, nailed in place. The plywood coverings shall be coated with synthetic lusterless enamel, color green, number 34087, conforming to Specification TT-E-527. The filter shall then be packed in a type II, class 1, style a crate conforming to Specification MIL-C-104, with the item securely anchored, blocked and braced to base of the crate in accordance with the appendix thereto. Flat galvanized strapping shall be used.

5.1.2 Level B. Not applicable.

5.1.3 Level C. With the inlet and outlet openings of the filter protected as specified in 5.1.1, the filter shall be packed for shipment in accordance with the manufacturers commercial practice, in such manner as to provide protection against damage during direct shipment from the supply source to the first receiving activity for immediate use. Containers used shall comply with the Uniform Freight Classification Rules or other common carrier regulations applicable to the mode of transportation.

5.2 Marking. In addition to any special marking required by the contract or order, all shipping containers shall be marked in accordance with Standard MIL-STD-129.

6. NOTES

6.1 Intended use. The gas and particulate filter covered by this specification is a component of Filter Unit, Gas and Particulate, 5000 CFM, M12, which is used for protecting fixed installations against toxic gases and aerosols.

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6.2 Ordering data. Procurement documents should specify:

- a. The title, number, and date of this specification.
- b. The level of packing required (see section 5).

6.3 Objective evidence. Provisions for objective evidence and inspection records, and maintenance of inspection records will be specified by the procuring activity.

6.4 Pilot lot. A pilot lot may be required to evaluate the supplier's production and quality control systems. The contracting officer will specify whether a pilot lot is required and applicable pilot lot acceptance criteria.

6.5 Supersession data. This specification supersedes Chemical Corps Purchase Description 197-54-581A, dated 13 November 1958.

Notice. When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Custodian:

Army - Chemical Corps

Preparing activity:

Army - Chemical Corps