

INCH POUND

A-A-55441

21 December 1995

Commercial ITEM DESCRIPTION

WASHER-EXTRACTOR, COMMERCIAL
FOR DECONTAMINATION OF PROTECTIVE EQUIPMENT AND CLOTHING

The General Services Administration has authorized the use of this commercial item description for all federal agencies.

1. SCOPE

1.1 Description This document covers washer-extractors with capacities ranging from 35 pounds to 250 pounds dry weight of soiled items. Machines are electrically operated and micro-processor controlled, with single compartment, end loading, cylinders.

1.2 Intended use. Washer-extractors described in this CID are for use in decontaminating protective clothing and other protective equipment worn by firemen, emergency response teams, and hazardous materials clean up crews.

2. CLASSIFICATION

2.1 Size. Sizes of Washer-extractors shall be in accordance with Table 1. Each size shall conform to the capacities and cylinder dimensions and volumes as stated in Table 1,

TABLE 1.

SIZE	CAPACITY MINIMUM LOAD (lb.)	CYLINDER DIMENSIONS (min.) diameter X depth (ins.)	CYLINDER VOLUME (min.) (cubic feet)
1	35	30 X 15	6
2	50	30 X 20	8
3	75	36 X 20	12
4	95	36 X 24	14
5	125	42 X 26	20
6	250	50 X 30	34

2.2 Type. The washer-extractors shall be of the following types as determined by supply chemical dispensing method.

Type 1 = Liquid supply.

Type 2 = Dry (powder or flake) supply.

Type 3 = Combination liquid and dry.

AMSC N/A

FSC 3510

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

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3. SALIENT CHARACTERISTICS

3.1 Standard product. Washer-extractors furnished under this CID shall be the manufacturer's current standard product including accessories and optional components that are offered to the commercial market. All accessories and options shall be identified with proposals tendered to the government in response to solicitations citing this document.

3.2 Design and construction. The washer-extractors shall be single compartment, end loading designs employing shell and cylinder design configuration. Sizes and capacities shall be as stated in paragraph 2.1 and shall be based on not more than six pounds of soiled linen per cubic foot of cylinder volume (gross). Self-diagnostic, programmable, microprocessor controls shall be used for all sizes of washer-extractors to store field programmable wash formulas for automatically monitoring and controlling, water temperature, water level, wash cycles, cylinder reversals, automatic chemical injection, load distribution prior to extraction, and extraction. A minimum of 10 pre-programmed wash formulas shall be provided for decontaminating protective clothing and gear. The microprocessor shall be capable of storing no fewer than 30 wash programs.

3.2.1 Codes and standards. Washer-extractors shall conform to the applicable requirements of the codes and standards specified in 3.2.1.1 through 3.2.1.4.

3.2.1.1 NFPA. Washer-extractors shall conform to National Fire Protection (NFPA) Standard No. 70, The National Electrical Code.

3.2.1.2 NEMA. Motor controllers, switches, relays, and time delays shall conform to performance requirements of National Electrical Manufacturers Association (NEMA) Standard Publications No. ICS 1-1993, Industrial Controls, General Requirements, and No ICS 3-1993, Industrial Control and Systems Factory-built Assemblies.

3.2.1.3 ANSI. Washer-extractors shall conform to the requirements of American National Standards Institute (ANSI) Standard 28.1, Safety Requirements for Commercial Laundry and Dry Cleaning Equipment and Operations.

3.2.1.4 OSHA. Washer-extractors shall conform to Occupational Safety and Health Standards Act (OSHA) 29 CFR 1910

3.2.2 Materials. Materials not definitely specified herein shall be of the quality specified by the manufacturer and shall conform to the manufacturer's own drawings, specifications, standards, and quality assurance procedures.

3.2.2.1 Conduit, fittings and electric wire. Electrical conduit shall be liquid tight flexible conduit with matching fittings and connectors. Electric wire shall be stranded copper, heat-resistant grade, thermoplastic insulated. Solid (nonstandard) wire shall not be used,

3.2.2.2 Fasteners. Threaded fasteners and rivets shall be made of types 304, 304L or 316 corrosion resistant alloy steel conforming to compositions stated in ASTM A 167, Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip

3.2.2.3 Cylinder. The cylinder shall be constructed of type 304, 304L, or 316 stainless steel conforming to compositions stated in ASTM A 167

3.2.2.4 Finish and color. The washer-extractors shall be finished according to the manufacturer's standard commercial practice

3.3 Performance. The washer-extractors shall conform to performance requirements expressed in paragraphs 3.3.1 through 3.3.4

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3.3.1 Vibration. Washer-extractors shall be designed to isolate and minimize vibration transmitted to the floor and surrounding building structure during the extraction cycle. The amplitude of the vibration at the base of the washer-extractor which is in contact with the floor shall not exceed 0.005 inch total indicator reading taken with a mass vibrometer when the washer-extractor is operating in the extraction cycle at full rated load and maximum extraction speed with a five percent load unbalance in one pocket of the cylinder. Vibration isolation design shall not require unusual or special foundation construction materials. Anchor bolts shall be selected from readily available materials, grades and sizes to handle anticipated dynamic loads.

3.3.2 Noise. Noise level shall not exceed 85 decibels (A scale), when measured at the operators position (in front of and within 36 inches of the control panel).

3.3.3 Cylinder reversing. Cylinder revolutions in one direction shall not vary by more than five percent from cylinder revolutions in the opposite direction between reversals

3.3.4 Pre-extract load distribution. Pre-extract load distribution shall be automatic and continue at distribution speed until any unbalance situation is reduced to an acceptable level for high speed centrifuging of the wash load.

3.4 Order of precedence. in the event of a conflict between the text of this CID and the referenced documents cited herein, the text of this CID shall take precedence. Nothing in this CID, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3.5 Data. Each machine shall include a copy of the manufacturer's standard "owner/operator manual" applicable to the machine. The manual shall include instructions for operating the machine, safety precautions, preventative and routine maintenance instructions, and installation instructions which identify utility interface and machine foundation details. This data shall be the same information that is normally provided with similar machines sold in the commercial market.

3.6 Metric product. Products manufactured to metric (SI) dimensions shall be considered on an equal basis with those manufactured using inch-pound units of measure, provided they fall within the specified tolerances using conversion tables contained in the latest revision of ASTM E 380, Standard Practice for Use of the International System of Units (SI), and all other requirements of this Commercial Item Description are met. If a product is manufactured to metric dimensions and those dimensions exceed the tolerances specified in inch-pound units, a request should be made to the contracting officer to determine if the product is acceptable.

4. REGULATORY REQUIREMENTS

4.1 Occupational Safety. Washer-extractors shall conform to Occupational Safety and Health Act (OSHA), 29 CFR 1910 (see 3.2.1 .4).

4.2. Recovered materials. The offeror/contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum practical extent. Recycled or reclaimed materials may be used in the construction of the equipment described herein. Recycled and reclaimed materials shall consist of previously used material which has been reprocessed to become a source of new raw materials. Under no conditions or circumstances shall the contractor submit to the Government for acceptance reconditioned or rebuilt components as a part of the equipment described herein.

5. QUALITY ASSURANCE PROVISIONS

5.1 Contractor certification. The contractor shall certify and maintain substantiating evidence that the product

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offered meets the salient characteristics of this Commercial item Description, and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices and is the same as the product offered for sale in the commercial marketplace. When specific quality assurance provisions are specified for any commercial characteristic the contractor shall maintain records resulting from his inspection(s) conducted in accordance with the specific quality assurance provisions. The government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided under the provisions of the contract. The government reserves the right to audit the contractor's quality assurance records.

5.2 Successful commercial operation. No item of equipment offered under this CID shall be acceptable unless the manufacturer has marketed equipment of the same size (similar capacity) and type in a commercial environment for a minimum period of one year. Equipment installed for test purposes in a manufacturer's plant or test laboratory shall not be considered as complying with this requirement.

5.3 Place and date of manufacture. Each machine shall bear an alpha-numeric code to indicate the manufacturer's plant where produced and the date that production occurred. This encoded information shall be permanently stamped or affixed to the machine.

5.4 Warranty. Unless otherwise specified in the contract, the manufacturer's standard commercial warranty terms shall apply. The warranty shall become effective with the date of startup of the equipment after installation is complete.

6. PACKAGING

6.1 Packaging, packing, palletization and marking. Unless otherwise specified (see 7.2) packaging, packing, and palletization shall be in accordance with ASTM D 3951. Washer-extractors shall be shipped fully assembled. Blocking or special shipping straps to protect the cylinder or other sensitive components may be used at the manufacturer's discretion.

6.2 Overseas military shipment (government unique requirement). When specified in the contract or purchase order, washer-extractors shall be preserved, packed, and marked for Levels A, B, or C of protection in accordance with the applicable requirements of MIL-L-3 153, Laundry and Dry Cleaning Machinery and Equipment, Packaging of (see 7.2).

7. NOTES

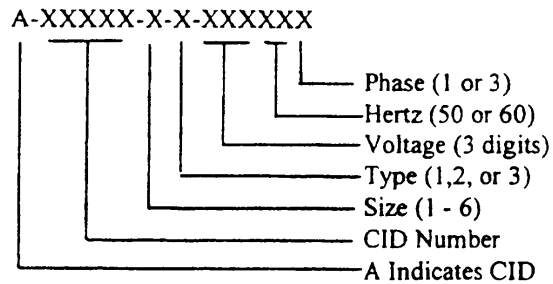
7.1. Commercial item certification. When this CID is used for procurement, the commercial item certification clause must appear in the solicitation.

7.2 Ordering Data. The following information is required when ordering items covered in this CID:

- a Title, number, and date of this document
- b Packing and packaging required (see 6.1 and 6.2).
- c Quantity
- d Size and Type (see 2 I and 2.2)
- e Electrical requirements (voltage, phase and hertz)
- f PIN (see 7.3)

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7.3 Part or Identifying Number (PIN) The following PIN procedure is for government purposes and does not constitute a requirement for the contractor. A CID based PIN to identify the item(s) procured to this CID shall be constructed as follows:



7.4 Referenced documents. Copies of referenced documents are available from the following sources:

Government Documents

Standardization Documents Order Desk
700 Robbins Avenue
Building 4, Section D
Philadelphia, PA 19111-5094

74.2 Non-government documents.

American National Standards Institute (ANSI)

American National Standards Institute
11 West 42nd Street
New York, NY 10036

National Electrical Manufacturers Association (NEMA)

National Electrical Manufacturers Association
2101 L Street, NW, Suite 300
Washington, DC 20037

ASTM (formerly American Society for Testing and Materials)

ASTM
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

National Fire Protection Association (NFPA)

National Fire Protection Association
One Battery march Park
Quincy MA 02269-9101

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7.5 Subject term (key word) list.

Washer extractor
Bunker gear
Decontamination
Protective equipment
Protective clothing
Firemen
Hazardous materials

7.6 Sources of supply. A partial list of manufacturers of washer-extractors described herein follows:

UNIMAC CO INC.
3595-T, Industrial Park Drive
Marianna, FL 32446-9458

PELLERIN-MILNOR CORP
Dept. TR
Kenner, LA 70063-0400

PRIMUS, INC
28 Mitchel Road. Bldg B
Ipswich, MA 01938

G A BRAUN, INC
461 E. Brighton Ave, P. O Box 70
Syracuse, NY 13205-0070

AMERICAN LAUNDRY MACHINERY, INC.
5050 Section Avenue
Cincinnati, OH 45212-2099

MILITARY INTEREST

Custodians
Air Force -99
Army - GL
Navy - YDI

Review activities
Army - MD

CIVIL AGENCY COORDINATING ACTIVITY
GSA/FSS-6FET-CO

PREPARING ACTIVITY
DLA-GS

(Project 3510-0341)