

MIL-L-43575A

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SUPERSEDING

MIL-L-43575

20 March 1968

MILITARY SPECIFICATION

LAUNDRY PRESS, COMMERCIAL, CABINET TYPE, SINGLE LAY,

AND CABINET, DRYING, FOR WASHABLE TROUSERS

This specification is mandatory for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope.- This specification covers a cabinet type laundry press which will press washable trousers, with a crease (see 6.5) in the front and back of the legs in one lay, and a drying cabinet to completely dry trousers (see 6.1).

1.2 Classification.- Items shall be selected from the following as specified (see 6.2):

- Item 1 - Press
- Item 2 - Drying cabinet

2. APPLICABLE DOCUMENTS

2.1 The following documents of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

SPECIFICATIONS

FEDERAL

- CC-M-636 - Motor, Alternating Current, (Fractional Horsepower).
- CC-M-641 - Motor, Alternating Current, (Integral Horsepower, 200 HP and Smaller).
- QQ-C-390 - Copper Alloy Castings (Including Cast Bar).
- QQ-N-281 - Nickel-Copper Alloy Bar, Plate, Rod, Sheet, Strip, Wire, Forgings, and Structural and Special Shaped Sections.
- QQ-N-288 - Nickel-Copper Alloy, and Nickel-Copper-Silicon Alloy Castings.

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- MIL-T-152 - Treatment, Moisture and Fungus Resistant, of Communications, Electronic, and Associated Electrical Equipment.
- MIL-L-3153 - Laundry and Dry Cleaning Machinery and Equipment (For Fixed Installations), Preparation for Delivery for Domestic and Overseas Shipment.

STANDARDS

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- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
- MIL-STD-130 - Identification Marking of U.S. Military Property.
- MIL-STD-461 - Electromagnetic Interference Characteristics, Requirements for Equipment.
- MIL-STD-462 - Electromagnetic Interference Characteristics, Measurement of.

(Copies of specifications and standards 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 documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA)

Publication ICL-1965 - Industrial Controls

(Application for copies should be addressed to the National Electrical Manufacturers Association, 155 East 44th Street, New York, N.Y. 10017.)

* UNDERWRITERS' LABORATORIES, INC. (U.L.) STANDARDS

(Application for copies of applicable UL standards should be addressed to the Underwriters' Laboratories, Inc., 1285 Walt Whitman Road, Melville, L.I., New York 11746; 207 East Ohio Street, Chicago, Illinois 60611; or 1655 Scott Boulevard, Santa Clara, California 95050.)

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NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

Standard No. 70 - National Electrical Code (1968).

(Application for copies should be addressed to the National Fire Protection Association, 60 Batterymarch Street, Boston, Massachusetts 02110.)

AMERICAN SOCIETY OF MECHANICAL ENGINEERS' CODE (ASME)

Boiler and Pressure Vessel Code, Section VIII, Unfired Pressure Vessels.

Welding Qualifications of the American Society of Mechanical Engineers.

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

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

Specification A167-63 - Corrosion-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.

Specification A176-63 - Corrosion-Resisting Chromium Steel Plate, Sheet, and Strip.

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

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

Standard Z8.1-1961 - Safety Code for Laundry Machinery and Operations.

(Application for copies should be addressed to the American National Standards Institute, 1430 Broadway, New York, New York 10018.)

(Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

3. REQUIREMENTS

3.1 First article.- This specification contains provisions for first article test and approval (see 4.2, 6.2, and 6.6).

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- * 3.2 Standard product.- Trouser presses and drying cabinets covered by this specification shall be the manufacturer's current standard products except for those changes necessary to comply with this specification. All accessories and components normally offered commercially shall be furnished with each laundry press and cabinet.

3.3 Codes and standards.-

- * 3.3.1 NFPA.- The laundry press and cabinets shall be wired to conform to NFPA Standard No. 70.
- * 3.3.2 UL.- All wiring, conduit, and fittings of the laundry press and cabinet shall conform to applicable Underwriters' Laboratories (UL) requirements for use in non-hazardous locations.
- * 3.3.3 NEMA.- Motor controllers, timers, pushbuttons, starters, and limit switches shall conform to performance requirements of NEMA Standard Publication IC1-1965.
- * 3.3.4 ANSI.- The laundry press and cabinets shall conform to the requirements of ANSI Z8.1 - Safety Code for Laundry Machinery and Operations.

3.3.5 ASME.- The laundry press and cabinet chest, chambers, and cylinders, shall comply with the provisions of the ASME Unfired Pressure Vessel Code, Section VIII.

3.4 Certification.- Prior to approval of the preproduction sample, or if none is submitted, prior to approval of the first shipment, the supplier shall submit satisfactory evidence to the contracting officer or his authorized representative, that the laundry presses and cabinets he proposes to furnish meet the requirements specified in 3.3.1, 3.3.2, 3.3.3, 3.3.4, and 3.3.5.

3.4.1 NFPA.- Acceptable evidence of meeting requirements of 3.3.1, shall be the manufacturer's certified statement that the presses and cabinets have been wired in accordance with NFPA Standard No. 70.

- * 3.4.2 UL.- Acceptable evidence of meeting requirements of 3.3.2 shall be the UL label or Listing Mark or certification from an independent testing laboratory acceptable to the contracting officer or his authorized representative that conduit, fittings, and wiring conform to applicable UL requirements for use in non-hazardous locations.

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* 3.4.3 NEMA.- Acceptable evidence of meeting the requirements of 3.3.3 shall be the manufacturer's certified statement that the motor controller(s) timers, pushbuttons, starters, and limit switches conform to NEMA Standard Publication No. ICI - 1965. A tag or label attached to the component stating that the component conforms to this standard is acceptable evidence.

* 3.4.4 ANSI.- Acceptable evidence of meeting the requirements of 3.3.4 shall be the manufacturer's certified statement that the laundry press and cabinets comply with ANSI Z8.1.

3.4.5 ASME.- Acceptable evidence of meeting the requirements of 3.3.5 shall be the manufacturer's certified statement that the laundry press and cabinet chests, chambers, and cylinders comply with the ASME Unfired Pressure Vessel Code, Section VIII.

3.5 Materials.- Materials not definitely specified shall be of the quality normally used by the manufacturer for the specified equipment, provided the completed items comply with all provisions of this specification.

3.5.1 Corrosion-resistant metals.- Corrosion-resistant metals as specified hereinafter shall conform to 3.5.1.1, 3.5.1.2, or 3.5.1.3.

3.5.1.1 Corrosion-resisting steel.- Corrosion-resisting steel shall conform to ASTM Specification A167-63 or A176-63, as applicable.

3.5.1.2 Nickel-copper alloy.- Nickel-copper alloy shall conform to QQ-N-281 or Composition A of QQ-N-288.

3.5.1.3 Copper alloy castings.- Copper alloy castings shall conform to alloy numbers G1, G2, G3, G5, G6, G7, or G8 of QQ-C-390.

3.5.2 Materials for fasteners.- Fasteners shall be of carbon or alloy steel, except where brass or corrosion-resistant metal is to be fastened, in which case the fasteners shall be of brass or corrosion-resistant metal, respectively. Where dissimilar metals are fastened, the fasteners shall be of corrosion-resistant metal and cathodic to base metals.

* 3.5.3 Pipe, tube, fittings, cylinders, and valves.- Pipe, tube, valves, cylinders, and fittings used for air and steam lines shall comply with the accepted manufacturers' commercial practice.

3.5.4 Conduit, fittings, and electric wire.- Electrical conduit shall be grounded metallic, rigid, or flexible steel. All electrical wire shall be heat resistant grade, thermoplastic insulated.

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- * 3.5.5 Motors.- Motors shall conform to the applicable requirements of CC-M-636 or CC-M-641, as applicable, and to the following requirements:

- (a) All motors shall have windings impregnated to resist moisture.
- (b) Motors shall have the proper starting characteristics and ample power with a reasonable factor of safety for their intended operation under full-load conditions without exceeding the permissible temperature rise.
- (c) Motors shall be equipped with ball bearings, except that motors of 1/2 horsepower or less when used for horizontal applications may have sleeve bearings. Motor bearings shall be of the permanently lubricated type or shall have adequate and accessible means for lubrication.
- (d) Each motor shall be provided with automatic reset overload protection.

3.6 Design and construction.- Construction of presses and drying cabinets covered by this specification shall conform to the general requirements and the construction details specified herein.

- * 3.6.1 Item 1 - press (cabinet type).- The press shall be an air-operated press designed for pressing washable trousers in a single lay. The waist and cuff expanders when being dressed or undressed shall be positioned either completely or partially outside the cabinet. The press shall be capable of simultaneously finishing all outside surfaces of cook's, baker's, and hospital attendant's trousers made from white cotton drill, 6.5 ounces per square yard; trousers fabricated of 35 percent cotton or rayon and 65 percent polyester yarns; and standard khaki and fatigue trousers. The press shall have automatic expander to fit waists from 28 to 48 inches, stretch legs with inseam measurements of 24 to 37 inches their full length, and fit cuffs 9-3/4 to 11-1/2 inches wide (measured across the leg from edge to edge at the bottom of the trousers). Presses shall be furnished complete with motors, driving mechanism, including production counter belts and chains, starters and controllers, master switches, timers, cutouts, and other electrical equipment and commercial accessories including anchor bolts, if, and as applicable. All presses furnished under this specification shall show that the assembly of component parts are complete; of proper interrelationship; moving parts evidence no undue vibration, noise, or over heating of bearings; and the opening and closing devices operate smoothly and positively when submitted to the test specified in 4.4.1. In addition to the above, the trousers pressed during the test shall conform to the following:

a. Top

- (1) Waist sides free of wrinkles.
- (2) Pocket area free of wrinkles.
- (3) Fly area free of wrinkles and puckering.
- (4) Crotch free of wrinkles or folds.

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b. Legs

- (1) Outseam free of wrinkles or folds.
- (2) Inseam free of wrinkles or folds.
- (3) Full length prominent crease (see 6.5) in both front and back of legs.
- (4) Outseam and inseam match within 1/4 inch from cuff to crotch.

* 3.6.1.1 Performance.— Presses furnished under this specification shall be capable of satisfactorily and completely processing approximately 100 trousers per hour when two presses are operated by one operator (see 4.4.1).

3.6.1.2 Heads, press.— The press heads shall be removable steam chambers of cast iron, cast steel, fabricated carbon steel, or corrosion-resistant metal shaped to conform to the contour surfaces against which they press. Cast-steel, cast-iron, or fabricated carbon steel ironing surfaces shall be plated or sprayed with nickel or corrosion-resistant metal. All ironing surfaces shall be polished smooth. Aluminum heads are not acceptable.

3.6.1.3 Safety devices.— Each trouser press shall be provided with (1) a touch safety device; or (2) press heads shall be interlocked with a cabinet door that shall automatically be activated stopping the pressing cycle, if the operator places a hand inside the machine; or (3) two manually operated controls may be conveniently located and arranged so that both hands of the operator must be on the controls before the heads can be closed (see 4.4.1).

3.6.2 Item 2 - drying cabinet.— The cabinet shall be steam heated and designed for drying approximately 100 washable trousers per hour which are not completely dry when removed from a press. It shall be approximately 23 inches wide, 8 feet long, and 6 feet high; of welded steel construction, and well insulated with batts not less than 1-inch thick. Sufficient heating coils shall be provided for maintaining a temperature between 250 and 275 degrees Fahrenheit (F.) within the cabinet. The cabinet shall be equipped with a conveyor for transporting trousers through the cabinet and shall be compatible with the press with which it is to be used. The conveyor shall be furnished with replaceable trouser holding clips. The conveyor control shall be interlocked with the presses so that when either of the presses goes through a pressing cycle, the conveyor will advance one station, (set of clips or hooks supporting one pair of trousers) or when specified (see 6.2), the cabinet shall be equipped with a foot pedal controlled, electrically driven gear motor. Cabinets shall be furnished complete with motors, driving mechanism, including belts and chains, starters and controllers, master switches, timers, cutouts, and other electrical equipment and commercial accessories, if, and as applicable. All cabinets furnished under this specification shall show that the assembly of component parts are complete; of proper interrelationship; moving parts evidence no undue vibration, noise, or overheating of bearings; and the opening and closing devices operate smoothly and positively when tested as specified in 4.4.1.

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3.6.3 Wiring and instructions.- Wiring shall be provided between motors, controllers, timers, pushbuttons, starters, and limit switches installed on the equipment and shall be done with materials specified in 3.5.4, as applicable, except metallic armored cable may be used where required for belt adjustment by moving a motor. All wiring shall terminate in connection boxes with provisions for connection beyond the machine. Each conductor shall be identified by a different color.

3.6.4 Motor control circuit.- Controllers shall be of the magnetic across-the-line type having a separate pole for each ungrounded conductor. Pushbutton control stations shall be mounted at points readily accessible to operators. Pushbuttons shall be fully protected or recessed to prevent accidental operation.

3.6.5 Applicability for current characteristics.- The electrical parts of the machine shall be designed for the voltage, frequency, and number of phases specified (see 6.2).

3.6.6 Piping.- Necessary integral pipe fittings shall be furnished and installed to comply with accepted plumbing practice. Inlet steam and air supply connections shall be supplied with manually operated shutoff valves.

3.6.6.1 Valves and traps.- Steam, drain, condensate (with three-valve bypass and trap), pressure reducing, and other operational valves shall be so installed as to be readily accessible for operation and maintenance.

3.6.6.2 Steam and air pressures.- Assembly of pipe, tube, fittings, coils, cylinders, chests, and chambers using steam shall be designed for a working steam pressure of 125 p.s.i.g. and shall be capable of withstanding a hydrostatic pressure established in accordance with the provisions of the ASME Unfired Pressure Vessel Code, without any leaks. Air lines and cylinders shall be designed to withstand a minimum of 80 p.s.i.g. without any leaks when tested as specified in 4.4.2.

* **3.6.7 Equipment bases.**- Bases shall be constructed so that points of contact with the floor shall be in the same plane. Provisions for anchoring to the floor shall be provided.

* **3.6.8 Replaceability of bearings.**- All bearings shall be readily replaceable.

* **3.6.9 Lubrication.**- Lubrication for forced type systems shall be provided and accessibly located for lubricating bearings, excluding motors (see 3.5.5), and chain or gear drives. Where lubricant reservoirs are required for chain or gear drives the reservoirs shall be provided with a threaded cap at the top and a drain plug at the bottom.

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- * 3.6.9.1 Seals.- Seals shall be provided to prevent the lubricant from entering parts of the machine where trousers are handled.
- * 3.6.10 Belts and pulleys.- V-belts shall be of the grades commercially known as multiple-drive or variable speed types, except where a single belt is furnished with a fractional-horsepower motor, a V-belt commercially known as a fractional-horsepower belt may be supplied. Pulleys for V-belts shall be suitably grooved for the type and size belts used. Chain drives shall be of the silent or roller-chain type. Means shall be provided for readily adjusting belt and chain tension.
- * 3.6.11 Spacing and extent of fastenings.- The spacing and extent of welds, rivets, bolts, and screws shall prevent bulging of the metals fastened.
- * 3.6.12 Marking for identification.- Each machine covered by this specification shall be marked for identification in accordance with MIL-STD-130.
- * 3.6.13 Finish and color.- Unless otherwise specified (see 6.2) each press and drying cabinet shall be finished in accordance with the manufacturer's standard practice except emergency stop pushbuttons shall be red and this color shall be limited to pushbuttons. Exposed surfaces of corrosion-resistant metals shall be finished to a commercial polish in accordance with the manufacturer's standard practice.
- * 3.6.14 Electromagnetic compatibility.- When specified (see 6.2), equipment shall be designed and equipped for electromagnetic compatibility in accordance with class IIB of MIL-STD-461 (see 4.4.3).
- * 3.6.15 Moisture and fungus resistant treatment.- When specified (see 6.2), electrical components shall be moisture and fungus resistant treated with material conforming to and applied as specified in MIL-T-152.
- * 3.6.16 Welders.- The welders performing the welding on assemblies, sub-assemblies, and on the end item shall be certified welders and shall have passed the qualification test as prescribed by either the "Standard Qualification Procedures of the American Welding Society" or "Welding Qualification of the American Society of Mechanical Engineers". The supplier shall furnish the Government with a list of names of his welders who are certified and have passed the test of either referenced codes and he shall certify that the welding of this equipment was performed by welders on the list.

3.7 Workmanship.- Presses and drying cabinets shall be free from defects such as fractures, splits, punctures, tears, dents, creases, or malformations. There shall be no sharp edges, slivers, burrs, or projections.

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3.7.1 Application of finish.- The finish applied to the end item shall be continuous, smooth, adherent, without discoloration or imbedded foreign material and shall contain no sags, runs, drips, creeps, laps, bubbles, streaks, wrinkles, blisters, scratches, pours, pits, lumps, flux, or orange peel. No rust, rough grinds, or toolmarks shall show through the coating.

3.7.2 Welding and brazing.- All surfaces of parts to be welded or brazed shall be clean. Welding and brazing shall be accomplished in a manner which will prevent the occurrence of burn holes, cracks, fractures, or incomplete fusion and deformation of material. All scale and flux deposits shall be removed from finished welds. Electrodes or welding rods used for welding shall deposit material compatible with the base metal.

3.7.3 Soldering.- Soldering shall be complete and adherent with all flux and residue removed and shall contain no pin holes.

3.7.4 Threaded fasteners.- Threaded fasteners shall not be broken, stripped, fractured, or loose.

3.7.5 Rivets.- Rivets shall be driven to completely fill the holes, with full size heads neatly finished and in full contact with the surface of the riveted members.

3.7.6 Electrical wiring.- Wiring shall not be cut, abraded, or have excessive insulation stripped, and shall be properly and tightly joined at terminals. Wiring shall have adequate slack to provide strain relief.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection.- Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the supplier may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.2 First article inspection.- When a preproduction sample is required it shall be examined for defects listed in table I, specified dimensions, and tested as specified in 4.4.1, 4.4.2, and when applicable 4.4.3. The presence of any visual defect, any dimension not within the specified requirements, or failure to pass any test shall be cause for rejection of the preproduction sample.

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4.3 Inspection.- Sampling for inspection shall be performed in accordance with MIL-STD-105, except where otherwise indicated hereinafter.

4.3.1 Component and material inspection.- In accordance with 4.1 above components and materials shall be inspected and tested in accordance with all the requirements of referenced specifications, drawings, and standards unless otherwise excluded, amended, modified, or qualified in this specification or applicable purchase document.

4.3.2 End item inspection.- A lot shall consist of all laundry presses or all drying cabinets offered for inspection at one time. The sample unit shall be one completely fabricated laundry press or drying cabinet, as applicable.

4.3.2.1 Visual examination.- The completely assembled end items shall be examined for defects in table I. The inspection level shall be level II with an acceptable quality level (AQL) of 2.5 for major defects and 6.5 for total defects expressed in terms of defects per hundred units.

TABLE I.- Classification of defects

Examine	Defect	Classification	
		Major	Minor
Finish	Not finished where required.	X	
	Finish not in accordance with manufacturer's standard practice (unless otherwise specified).	X	
	Ferrous metal ironing surfaces not plated or sprayed as specified.	X	
	Emergency stop button not specified color.		X
	Rust, rough grinds or tool marks show through coating.		X
	Ironing surfaces not smoothly polished.	X	
	Pushbutton color not as specified.		X
	Sags, runs, drips, creeps, loops, bubbles, streaks, wrinkles, blisters, scratches, pores, lumps, orange peel.		X
	Exposed surfaces of corrosion-resisting steel not finished to a commercial polish.	X	

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TABLE I.- Classification of defects (cont'd)

Examine	Defect	Classification	
		Major	Minor
Construction and workmanship (applicable to all components and assemblies)	Fabrication		
	Any component missing.	X	
	Kinks and sharp bends in sheet metal.		X
	Any component fractured, split, punctured, torn, dented, bowed or sprung.	X	
	Any burr, sharp edge, sliver or projection.	X	
	Edges not smooth.		X
Bolted connections	Bolt holes not accurately punched or drilled.		X
	Burrs around holes not removed.		X
	Washers or lockwashers not provided in accordance with commercial practice.		X
	Bolts, nuts, and screws broken, stripped, fractured, or not drawn tight.		X
Rivets (when applicable)	Missing, loose, broken, or inadequately peened.		X
Welding and brazing	Missing, incomplete, through burn holes, severe undercut, fractured, porous, or otherwise not fused.	X	
	Slight slag inclusion, slight undercut, not smooth and uniform, scale or flux deposit not removed.		X
Electrical assembly	Wiring cut, abraded, or not properly joined.	X	
	Adequate slack not provided for wiring to relieve strain, or excessive insulation stripped from wiring.	X	
	Electrical wire is not heat resistant grade thermoplastic.	X	
	All wiring not terminated in connection box.	X	

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TABLE I.- Classification of defects (cont'd)

Examine	Defect	Classification	
		Major	Minor
Construction (general)	Motor bearings, where applicable, not accessible for lubrication.	X	
	Pushbuttons not fully protected or recessed, or not mounted at points convenient to operator.	X	
	Bearings not readily replaceable.	X	
	Provisions not made for adjusting chain and belt tension.	X	
	Equipment bases not in same place.	X	
	Valves not readily accessible for operation and maintenance.	X	
	Head of press not removable or not shaped to conform to pressing surfaces.	X	
	Press head safety device not as specified (see 3.6.1.3).	X	
	Panels for inspection and maintenance not readily removable.	X	
	Insulation not as specified.	X	
	Drying cabinet not equipped with foot pedal control (when specified).	X	
Equipment manual	Missing, incomplete, illegible.	X	
Identification marking	Missing, incomplete, illegible.	X	

4.3.2.2 Dimensional examination.- Inspection shall be made of the end items for compliance with dimensions specified. The inspection level shall be S-2 with an AQL of 4.0 defects, expressed in terms of defects per hundred units.

4.3.2.3 Testing of the end item.- Each unit of production shall be tested as specified in 4.4.2 and failure to pass this test shall be cause for rejection of the unit. When a preproduction sample is not required, the first unit of production shall be tested as specified in 4.4.1 and when applicable, 4.4.3. The functional test specified in 4.4.1 will be witnessed by a representative of the Government prior to acceptance. The functional test shall be performed, unless satisfactory evidence is produced that the press and cabinet, as applicable, have satisfactorily passed this test either in the manufacturer's plant or in a commercial application. The Government reserves the right to check test such items to determine validity of the evidence produced. Failure to pass any test shall be cause for rejection of the unit.

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4.3.3 Examination of preparation for delivery.- Examination shall be made for preservation, packaging, packing, and marking in accordance with MIL-L-3153.

4.3.4 Code and standards compliance.- Proof of compliance with the requirements of 3.3 shall be made available to the Government representative.

4.4 Tests.-

* 4.4.1 Functional test.- The presses shall be capable of satisfactorily and completely processing cook's, baker's, or hospital attendant's trousers; standard khaki trousers; fatigue trousers; and 35 percent cotton or rayon and 65 percent polyester trousers at a rate of 100 per hour when the two presses are operated by one (1) operator. The trousers shall be mixed sizes from large to small. Test is to be made on trousers which have been washed, starched (heavy), and extracted for not less than 12 minutes nor more than 15 minutes when trousers are to be finished without preconditioning. When trousers are to be preconditioned, the trousers shall be extracted for 10 minutes and preconditioned for 4 minutes in a laundry tumbler, air heated to not more than 190°F. Washing, extracting, and pre-conditioning operation shall be performed within a reasonable length of time prior to pressing on the presses. The trousers shall be supplied by the Government under the following conditions:

The cook's, baker's, or hospital attendant's cotton khaki trousers; fatigue trousers, and 35/65 trousers will be shipped to the low responsive bidder at the Government's expense and returned, after completion of the test, at the Government's expense. The bidder shall be responsible for any loss or damage to the trousers which is incurred while in the bidder's possession. Prior to their return, the trousers shall be laundered and packed by the bidder in the same manner in which they were shipped to the bidder. The trouser press and drying cabinet shall be connected to power having the specified characteristics and tested to determine compliance with the following requirements:

(a) The assembly of components; undue vibration or noise; overheating of parts i.e., bearings; opening and closing devices; and structural failures (see 3.6.1 and 3.6.2).

(b) Operation of expanders for waists, legs, and cuffs for compliance with the requirements of 3.6.1.

(c) Operation of applicable safety device for compliance with the requirements of 3.6.1.3.

(d) Operation of conveyor control interlock, when applicable, for compliance with the requirements of 3.6.2.

(e) Temperature of cabinet for compliance with the requirements of 3.6.2 when applicable.

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(f) Seals fail to prevent lubrication leak (see 3.6.9.1).

(g) Trousers shall be examined to determine conformance with 3.6.1 for the following:

- (1) Waist sides free of wrinkles.
- (2) Pocket area free of wrinkles.
- (3) Fly area free of wrinkles and puckering.
- (4) Crotch free of wrinkles or folds.
- (5) Leg outseam free of wrinkles or folds.
- (6) Leg inseam free of wrinkles or folds.
- (7) Full length prominent crease (see 6.5) in both front and back of legs.
- (8) Outseam and inseam do match within 1/4 inch from cuff to crotch.

Any nonconformance to the above shall constitute failure of the test.

* 4.4.2 Air pressure tests.-- All air lines and cylinders shall be tested with 80 (+ 10 -0) p.s.i.g. air pressure. The test pressure shall be maintained for 10 minutes to determine that no leaks are present. Nonconformance to 3.6.6.2 shall constitute failure of this test.

* 4.4.3 Electromagnetic compatibility test.-- When electromagnetic compatibility is required, the preproduction sample or initial unit of production shall be tested by the supplier in accordance with test methods CE03 and RE02 of MIL-STD-462. The Government reserves the right to witness tests performed by the supplier or his private testing organization. The supplier shall furnish the contracting officer, for approval, the Interference Control Plan, the EMI/EMC Test Plan, and the Electromagnetic Test Report required in MIL-STD-461. Upon approval of the test report by the contracting officer and provided all other requirements of the specification are met the sample or the initial unit of production, as applicable, shall be used as a model for all production units.

5. PREPARATION FOR DELIVERY

5.1 Preservation, packaging, packing and marking for level A, B, or C shall be in accordance with MIL-L-3153 (see 6.2).

6. NOTES

6.1 Intended use.-- The trouser press (item 1) is intended for use in pairs without a drying cabinet (item 2) or as a unit (2 presses with each drying cabinet), capable of being operated by one person in a fixed laundry for pressing cook's, baker's, and hospital attendant's trousers; standard cotton khaki trousers; fatigue trousers; and 35/65 trousers.

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* 6.2 Ordering data.- Procurement documents should specify the following as applicable:

- (a) Title, number, and date of this specification.
- (b) Item required (see 1.2).
- (c) First article (see 3.1, 4.2, and 6.6).
- (d) When a foot pedal controlled, electrically driven gear motor is required (see 3.6.2).
- (e) Power characteristics required (voltage, phase, frequency) (see 3.6.5).
- (f) Finish, if other than manufacturer's standard (see 3.6.13).
- (g) When drawings are required for installation purposes, request that successful bidder furnish drawings showing the exact dimensions of the item, overall floor space requirement, location of hold down bolts, location and size of inlet and outlet lines, the point where electrical connection is to be made, and the electrical characteristics of the motor and any electrical equipment. For Air Force purchases, these drawings are required within 10 days after award to the successful bidder.
- (h) When electromagnetic compatibility is required (see 3.6.14).
- (i) When moisture and fungus resistant treatment is required (see 3.6.15).
- (j) Selection of applicable levels of preservation, packaging and packing (see 5.1).

6.3 Electromagnetic compatibility.- When electromagnetic compatibility is required, the contracting officer should submit a copy of the Interference Control Plan, the EMI/EMC Test Plan, and the test report required (see 4.4.3) to the Commanding General, U.S. Army Electronics Command, ATTN: AMSEL-GG-EI, Fort Monmouth, New Jersey 07703 for approval.

6.4 Successful commercial operation.- No laundry press or cabinet will be acceptable unless the manufacturer has had a laundry press and cabinet of the same type and design as that specified operating successfully in a commercial or institutional laundry establishment for at least one year. Equipment installed for test purposes in a manufacturer's plant or laboratory shall not come within the category of successful commercial operation.

6.5 Crease.- For Air Force purchases, "crease" is defined as a sharp line made by folding fabric and by means of pressure and heat, creating an acute angle having a thin edge, and not being rounded or obtuse.

6.6 First article.- The press and cabinet covered by this specification requires first article test and approval under the appropriate provisions of paragraph 7-104.55 of the Armed Services Procurement Regulations. The first article should consist of one unit. The contracting officer should include specific instructions in all procurement instruments, regarding arrangements for examination, test, and approval of the first article.

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6.7 Contract data requirements.- Any requirements for equipment manuals, drawings, and supervision of installation for the item covered by this specification should be included in DD Form 1423 Contract Data Requirements List and cited in the contract.

- * 6.8 The margins of this document have been marked with an asterisk (*) to indicate where changes (additions, modification, corrections, deletions) from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and suppliers 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 issue.

Custodians:

Army - GL
Navy - YD
Air Force - 84

Preparing activity:

Army - GL
Project No. 3510-0198

Review activity:

Air Force - 45

User activities:

Army - CE
Navy - MC

SPECIFICATION ANALYSIS SHEET

Form Approved
Budget Bureau No. 22-R255

INSTRUCTIONS: This sheet is to be filled out by personnel, either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.

SPECIFICATION LAUNDRY PRESS, COMMERCIAL, CABINET TYPE, SINGLE LAY,
MIL-L-43575A AND CABINET, DRYING, FOR WASHABLE TROUSERS

ORGANIZATION

CITY AND STATE

CONTRACT NUMBER

MATERIAL PROCURED UNDER A

☐ DIRECT GOVERNMENT CONTRACT ☐ SUBCONTRACT

1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A. GIVE PARAGRAPH NUMBER AND WORDING.

B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID

3. IS THE SPECIFICATION RESTRICTIVE?

☐ YES ☐ NO (If "yes", in what way?)

4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)

SUBMITTED BY (Printed or typed name and activity - Optional)

DATE

DD FORM 1426
1 JAN 66

REPLACES EDITION OF 1 OCT 64 WHICH MAY BE USED.

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Natick, Massachusetts 01760

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