26 March 1971 SUPERSEDING MIL-D-43503 17 May 1967

## MILITARY SPECIFICATION

# DOUGH MIXING MACHINE, GASOLINE ENGINE DRIVEN

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

## 1. SCOPE

1.1 This specification covers one type of gasoline engine driven dough mixing machine.

## 2. APPLICABLE DOCUMENTS

2.1 The following documents, of the issue 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**

FF-B-171	- Bearings, Ball, Annular (General Purpose).
QQ-C-390	- Copper Alloy Castings (Including Cast Bar).
QQ-I-652	- Iron Castings, Gray.
QQ-S-681	- Steel Castings.
QQ-W-428	- Wire, Steel, High Carbon, Round, Uncoated For Mechanical Springs, (General Purpose).
RR-C-271	- Chains and Attachments, Welded, Weldless, and Roller Chain.
RR-H-651	- Hose Assembly, Metal, (Flexible, Interlocking).
TT-E-529	- Enamel, Alkyd, Semi-Gloss.
TT-P-636	- Primer Coating, Alkyd, Wood and Ferrous Metal.
WW-P-406	- Pipe, Steel (Seamless and Welded) (For Ordinary Use).
PPP-B-601	- Boxes, Wood, Cleated-Plywood.
PPP- <b>T</b> -60	- Tape: Pressure-Sensitive Adhesive; Waterproof, For Packaging.

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# MILITARY

MIL-P-116	_	Preservation, Methods Of.
MIL-B-121	-	Barrier Material, Greaseproofed, Waterproofed, Flexible.
MIL-V-173	-	Varnish, Moisture-and-Fungus-Resistant (For Treatment of Communications, Electronic, and Associated Equipment).
MIL-S-867	_	Steel Castings, Corrosion Resisting Austenitic.
MIL-V-1137	-	Varnish, Electrical-Insulating (For Electro- Motive Equipment).
MIL-B-5687	-	Bearings, Sleeve; Washers, Thrust, Sintered, Metal Powder, Oil-Impregnated.
MIL-E-10062		Engines: Preparation for Shipment and Storage Of.
MIL-H-10868	-	Hose Assembly, Rubber, Utility, Gasoline (1/4-Inch Inside Diameter).
MIL-A-10957	-	Adapter Kit, Gravity Feed, Military Gasoline Can and 55 Gallon Drum.
MIL-E-11275		Engines, Gasoline, Industrial Type, General Specification for.

# STANDARDS

# FEDERAL

			Chemical Compostion and Hardenability.
FED-STD-151	-	Metals;	Test Methods.
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# MILITARY

MIL-STD-105	-	Sampling Procedures and Tables for Inspection by
		Attributes.
MIL-STD-129	-	Marking for Shipment and Storage.
MIL-STD-130		Identification Marking Of U. S. Military Property.
MIL-STD-461	-	Electromagnetic Interference Characteristics, Requirements for Equipment.
omn //o		Electromagnetic Interference Characteristics,
MIL-STD-462	-	Measurement Of.
MIL-STD-1186	-	Cushioning, Anchoring, Bracing, Blocking, and
		Waterproofing: With Appropriate Test Methods.

# DRAWINGS

# ARMY NATICK LABORATORIES

5-11-712	<ul> <li>Dough Mixing Machine, Gasoline-Engine Driven, M-1945, Parts List.</li> </ul>
5-11-713	<ul> <li>Dough Mixing Machine, Gasoline-Engine Driven,</li> <li>M-1945, General Assembly.</li> </ul>
5-11-714	<ul> <li>Dough Mixing Machine, Gasoline-Engine Driven,</li> <li>N-1945, Sectional Views.</li> </ul>
5-11-715	- Dough Mixing Machine, Gasoline-Engine Driven, M-1945, Frame Assembly, Spare Parts Box and Miscellaneous Details.
5-11-716	- Dough Mixing Machine, Gasoline-Engine Driven, M-1945, Frame Details.
5-11-717	- Dough Mixing Machine, Gasoline-Engine Driven, M-1945, Frame Details and Agitator.
5-11-718	- Dough Mixing Machine, Gasoline-Engine Driven, M-1945, Bowl Assembly and Details.
5-11-719	- Dough Mixing Machine, Gasoline-Engine Driven, M-1945, Bowl Cover Assembly, Left Housing Cover and Miscel- laneous Details.
5-11-720	<ul> <li>Dough Mixing Machine, Gasoline-Engine Driven, M-1945,</li> <li>Dump Segment, Dump Worm Shaft and Miscellaneous</li> <li>Details.</li> </ul>
5-11-721	- Dough Mixing Machine, Gasoline-Engine Driven, M-1945, Check Cylinder, Clutch Shifter, Shaft Assembly and Details.
5-11-722	- Dough Mixing Machine, Gasoline-Engine Driven, M-1945, Agitator Gear, Trip Shaft Assembly and Miscellaneous Details.
5-11-723	- Dough Mixing Machine, Gasoline-Engine Driven, M-1945, Drive Bracket.
5-11-724	<ul> <li>Dough Mixing Machine, Gasoline-Engine Driven, M-1945,</li> <li>Left Trunnion Drive Shaft and Miscellaneous Details.</li> </ul>
5-11-725	- Dough Mixing Machine, Gasoline-Engine Driven, M-1945, Right Trunnion and Miscellaneous Details.
5-11-726	<ul> <li>Dough Mixing Machine, Gasoline-Engine Driven, M-1945,</li> <li>Right Trunnion Plate, Handle and Miscellaneous</li> <li>Details.</li> </ul>

(Note: Miniature copies of Drawing Nos. 5-11-713 and 5-11-714, identified as figures 1 and 2, respectively, are attached for information purposes only.)

#### **PUBLICATIONS**

Department of the Army Technical Manual TM 10-410 Bread Baking.

(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 to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

Standard ASTM E 10-66 - Brinell Hardness of Metallic Materials.

Specification A 167-63 - Corrosion-Resisting Chromium-Nickel Steel Plate, Sheet and Strip.

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

(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 Alternate components. - Components offered as equivalent to components specified hereinafter and on the referenced drawings as a specific manufacturer's part number or equal shall be functionally equal, of equal or better quality, with the manufacturer's part number identified. The incorporation and inclusion of such a component in the design of the specified item shall not require modification or change to any specified component, and shall not reduce ease of maintenance to it or any other components unless such modification or change is specifically approved by the contracting officer. Prior to manufacture of the preproduction sample, the supplier shall submit, for the contracting officer's approval, a list identifying each proposed alternate component, together with proof that each listed component complies with requirements specified above. The contracting officer, at his option, may require a physical sample of the proposed substitution. Approval of the submitted listing, together with necessary supporting data, authorizes the commencement of the preproduction sample manufacture but does not relieve the supplier of the responsibility that these components perform in accordance with specified requirements when incorporated into the end product.

- \* 3.2 First article.— When specified (see 6.2), the supplier shall furnish a sample for first article inspection and approval (see 4.2, 6.2 and 6.5).
- \* 3.3 Materials.— Materials not definitely specified shall be of the quality normally used by the manufacturer for dough mixing machines provided the completed item complies with all provisions of this specification.

# 3.3.1 Carbon steel.-

- 3.3.1.1 <u>Bar, sheet, and strip.</u>— Carbon steel bar, sheet, and strip shall be of the chemical composition shown on the applicable drawings and in accordance with FED-STD-66.
- 3.3.1.2 <u>Spring wire.</u> Carbon steel spring wire shall conform to type II of QQ-W-428.

## 3.3.2 Castings.-

3.3.2.1 <u>Iron</u>.- Iron castings shall conform to class 25 of QQ-I-652 and shall have the following chemical analysis:

Carbon - 2 to 3.25 percent Manganese - 0.75 percent maximum

Silicon - 1.75 to 3.00 percent Phosphorus - 0.80 percent maximum

Sulphur - 0.15 percent maximum

- 3.3.2.2 <u>Copper alloy</u>. Copper alloy castings shall conform to alloy number E8 of OQ-C-390.
- 3.3.2.3 <u>Carbon steel</u>. Carbon steel castings shall conform to any class 80-50 through 175-145 of QQ-S-681.
- 3.3.2.4 <u>Corrosion-resisting steel.</u>— Corrosion resisting steel castings shall conform to class I of MIL-S-867.
  - 3.3.3 Primer. Primer shall conform to TT-P-636.
- 3.3.4 Enamel. The enamel shall conform to class A or B of TT-E-529 and the color shall conform to number 24087 of FED-STD-595.
- 3.3.5 Roller chain. The roller chain shall conform to type III, standard chain No. 50 with roller link plate, single strand, of RR-C-271.
- 3.3.6 <u>Metal tubing.</u> The flexible metal tubing shall conform to type I or II of RR-H-651 with a 1-inch inside diameter.

- 3.3.7 <u>Ball bearing.</u> The ball bearings shall be of the type and class shown on the applicable drawings and shall conform to FF-B-171.
- 3.3.8 <u>Bronze bushings</u>.— The oil impregnated bronze bushings shall conform to type I of MIL-B-5687.
- 3.3.9 Steel pipe. Steel pipe shall conform to weight A, class 1 of WW-P-406.
- 3.3.10 <u>Hardware</u>.- Bolts, nuts, screws, washers, and miscellaneous hardware shall be as specified on the applicable drawings and shall conform to standard commercial practice.
- 3.3.11 Corrosion-resisting steel. Corrosion-resisting steel in any form, other than castings, shall conform to the chemical composition of any type in the 300 series specified in ASTM A 167-63.
- 3.4 Design and construction.— The design and construction of all components and assemblies of the dough mixing machine covered by this specification shall conform to the details, design, dimensions, material classification, and sizes thereof shown on Drawing Nos. 5-11-712 through 5-11-726 inclusive. All dough mixing machines shall operate as intended, with all controls and components functioning properly, and without failure of any component or assembly when tested as specified in 4.4.2. The dough mixing machine shall uniformly mix and develop 67 to 93 pounds of field garrison sheet bread dough, made in accordance with the dough formula and dough preparation requirements for straight dough garrison sheet bread specified in TM 10-410, in a maximum of 25 minutes when tested as specified in 4.4.3.
- \* 3.4.1 Engine. The engine shall be a single cylinder, 4-cycle engine and shall conform to group I of MIL-E-11275. When operating at 2000 revolutions per minute, the engine shall deliver a minimum of 3 continuous brake horsepower and 10-foot-pounds of torque. The engine shall not have a gas tank but shall be supplied with a sediment bowl, strainer, and the necessary fittings to enable connection to the hose assemblies specified in MIL-H-10868 and MIL-A-10957. The engine exhaust manifold shall provide for 1-inch IPS pipe with API threads. The engine base plate shall be fabricated from steel of a minimum thickness of 10 gage (0.134 inch nominal) specified in 3.3.1.1. The base plate shall be located to conform to the mounting bolt holes on the engine and shall have weldnuts to facilitate removal of the engine. Engine exhaust gases shall pass through an 8-foot length of tubing specified in 3.3.6 with a muffler attached to the end.

## 3.4.2 Hardening.-

- 3.4.2.1 <u>Case-hardening.</u>— Components specified on the applicable drawings to be case-hardened shall have a case depth not less than 0.025 inch (see 4.3.1.2).
- 3.4.2.2 <u>Flame hardening.</u>— Components shall be flame hardened as shown on the applicable drawings.
- 3.4.2.3 <u>Brinell hardness</u>.— Components specified on applicable drawings to be within a specific Brinell hardness range shall be tested as specified in 4.3.1.3.
- \* 3.4.3 <u>Electromagnetic compatibility</u>.— The dough mixing machine shall be designed and equipped for electromagnetic compatibility in accordance with class IIIC of MIL-STD-461 (see 4.4.1).

#### 3.5 Finish.-

- 3.5.1 Fungus and moisture resistance treatment of electrical components.—Unless otherwise specified (see 6.2), electrical components shall be treated to resist fungus and moisture as follows:
- (a) Electrical components such as switches, fuses and contact distributors, spark plugs, and magnetos shall not be treated. Other materials and components which are inherently fungus resistant or are protected by hermetic sealing need not be treated.
- (b) Circuit elements, not covered in (a) above, having a temperature rise of not more than 40 degrees centigrade (C.) when operating at full load, shall be coated with a fungus-resistant varnish conforming to MIL-V-173. Circuit elements include but are not limited to cable, wire, switch-boards, panelboards, terminal end junction blocks, junction boxes, capacitors, and coils.
- (c) Circuit elements, such as motor coils, generator and transformer windings, and similar electrical components having a temperature rise exceeding 40 C. when operating at full load, shall be given two coats of varnish conforming to type M, grade CB of MIL-V-1137 and one sealer coat conforming to type M, grade CA of MIL-V-1137. The coats shall be applied by the vacuum-pressure, immersion, centrifugal, pulsating pressure, or build-up method to fill all interstices in the coils and preclude entrapped air or moisture. The sealer coat may also be applied by brushing or spraying.

- \* 3.5.2 Dough mixing machine. The entire outside surface of the dough mixing machine shall be thoroughly cleaned and given one coat of primer specified in 3.3.3 followed by two coats of enamel specified in 3.3.4. The inner surface of each panel in the cabinet shall be given a minimum 1/8-inch thick bituminous coat for sound deadening and rust preventing purposes.
  - 3.5.3 Mixing bowl. The mixing bowl inner surface shall have a 2B finish.
  - 3.6 Marking. Marking for identification shall be in accordance with MIL-STD-130 and shall be located as shown on Drawing No. 5-11-713.
  - 3.6.1 <u>Instruction plate</u>.- Each dough mixing machine shall have an instruction plate as shown on Drawing No. 5-11-722, bolted to the inside of the front door.
  - 3.7 Government furnished property. The components listed below will be furnished to the supplier by the Government.

<u>Item</u>	Quantity per Dough Mixer	Nomenclature	Federal Supply Number (FSN)	Specification
1	1	Hose Assembly	4720-303-3995	MIL-H-10868
2		Adapter Kit	7240-360-0091	MIL-A-10957

- 3.8 Workmanship.— Welds shall be sound and completely fused and free from pits, holes, or fissures. Scale and flux deposits shall be removed from the finished welds. External welds at joints or seams in the final assembly shall be ground smooth and finished so that adjacent surfaces shall match. Parts to be welded shall be clean, with scale or other foreign matter removed. Welding methods shall be as shown on the applicable drawings listed in section 2.
  - 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 the defects listed in table I and for the dimensions specified, and tested as specified in 4.4.1, 4.4.2, and 4.4.3. The presence of any defects listed in table I or any dimension not within specified requirements shall be cause for rejection of the preproduction sample.
  - 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, standards, and drawings unless otherwise excluded, amended, modified, or qualified in this specification or applicable purchase document.
- 4.3.1.1 Chemical analysis.— Iron castings shall be tested for chemical analysis in accordance with method 111.2 of FED-STD-151 to determine compliance with the chemical compostion specified in 3.3.2.1. Each component specified to be cast iron shall be tested as follows: The lot shall be the number of like cast iron components offered for inspection at one time. The sample unit shall be one like cast iron component. The inspection level shall be S-1 with an acceptable quality level (AQL) of 6.5, expressed in terms of defects per hundred units.
- 4.3.1.2 <u>Case-hardening.</u>— Components specified to be case-hardened shall be tested in accordance with standard commercial practice to determine compliance with 3.4.2.1. Each case-hardened component shall be tested as follows: The lot shall be the number of like case-hardened components offered for inspection at one time. The sample unit shall be one like case-hardened component. The inspection level shall be S-1 with an AQL of 6.5, expressed in terms of defects per hundred units.
- 4.3.1.3 <u>Brinell hardness.</u>— Components specified to be within a specific Brinell hardness range shall be tested in accordance with ASTM E 10-66 to determine compliance with 3.4.2.3. The lot shall be the number of like components offered for inspection at one time. The sample unit shall be one like component. The inspection level shall be S-1 with an AQL of 6.5, expressed in terms of defects per hundred units.

## 4.3.2 In-process inspection.-

4.3.2.1 <u>Process examination</u>.— Examination shall be made of the following processes to determine conformance with specified requirements. Whenever a deviation is noted correction shall be made to items and process.

- (a) Fungus and moisture resistance treatment of electrical components (see 3.5.1).
- (b) Flame hardening of components, as applicable (see 3.4.2.2).
- (c) Cleaning, priming, and painting of exterior surfaces (see 3.5.2).(d) Coating of inner surfaces of frame (see 3.5.2).
- (e) Preparation of surfaces to be welded and welding methods (see 3.8).
- 4.3.3 End product inspection. The inspection lot shall be all the dough mixing machines offered for inspection at one time. The sample unit shall be one completely fabricated dough mixing machine.
- 4.3.3.1 Visual examination -- Examination shall be made of the dough mixing machines for the defects listed in table I. The inspection level shall be II with AQL's of 2.5 for major defects and 10.0 for total defects, expressed in terms of defects per hundred units.

TABLE I.- Classification of defects

		Classification	
Examine	Defect	Major	Minor
Finish	Not finished where required	x	
	Color not as specified		X
	Bowl finish not 2B		x
Design, construc-	Any part missing	x	
tion and workman-	Any part fractured, split, punctured,		
ship (applicable	dented, deteriorated, bowed, or	X	
to all components and assemblies)	malformed	Λ	
Engine	Engine cannot be mounted to base plate	x	
	Engine not secured to base plate with weldnuts		x
	Fitting not size specified	X	
Welding	Scale or flux not removed		x
	Welds not ground smooth and finished		X
	Welds incompletely fused, or has pits,		
•	holes, or fissures	X	
Marking for	Missing, incomplete, illegible, not		
identification	affixed or marked in prescribed manner,		
	not located as specified		X
Marking	Missing, incomplete, illegible, not		
(instruction)	affixed or marked in prescribed		
	manner, not located as specified	X	

- 4.3.3.2 <u>Dimensional examination</u>.— Examination shall be made of the dough mixing machine for defects in dimensions specified herein and on the Drawings. Any dimension not within specified requirements shall constitute a defect. The inspection level shall be S-2 with an AQL of 4.0, expressed in terms of defects per hundred units.
- \* 4.3.3.3 Testing of the end item. When a preproduction sample is not required, the initial production unit shall be tested in accordance with 4.4.1 and 4.4.3. Each dough mixing machine shall be tested as specified in 4.4.2. Any nonconformance shall be cause for rejection of the unit.
  - 4.3.4 Examination of preparation for delivery.— An examination shall be made to determine that preservation and packaging, packing, and marking, as required by section 5 of this specification, are complied with. Defects shall be as indicated in table II. The lot shall be the number of containers offered for inspection at one time. The sample unit shall be one shipping container fully prepared for delivery. The inspection level shall be S-2 with an AQL of 6.5, expressed in terms of defects per hundred units.

TABLE II. - Examination of preparation for delivery

Examine	Defect
Marking	Missing; incorrect; illegible; of improper size, sequence, location, or method of application
Materials	Component missing, damaged, or otherwise defective
Workmanship	Inadequate application of components. Sealing inadequate, improper, or missing Bolts, and closures improperly affixed Components improperly secured
Preservation	Preservative improperly applied or missing

<sup>4.3.4.1 &</sup>lt;u>Examination of shipping containers.</u>— Examination for defects in strapping shall be in accordance with PPP-B-601 and examination for defects in blocking, bracing, and anchoring shall be in accordance with MIL-STD-1186.

#### 4.4 Tests.-

- \* 4.4.1 Electromagnetic compatibility.— When electromagnetic compatibility is required, the preproduction sample or initial unit of production, as applicable, shall be tested by the supplier in accordance with test method REO5 of MIL-STD-462. The Government reserves the right to witness tests performed by the supplier or an independent testing agency. The supplier shall furnish the contracting officer written certification that the Interference Control Plan, the EMI/EMC Test Plan, the electromagnetic test report and the requirements meet MIL-STD-461.
- \* 4.4.2 Operation test. Each dough mixing machine shall be operated for one hour, without load, to determine compliance with 3.4. Failure to operate in accordance with 3.4 shall constitute failure of this test.
- \* 4.4.3 Functional test. Using the dough formula and dough preparation requirements for straight dough garrison sheet bread specified in TM 10-410, the dough mixing machine shall be operated mixing 3 maximum capacity batches to determine compliance with 3.4. Failure of the mixer to produce the smooth appearance of a well mixed dough shall constitute failure of this test.
  - 5. PREPARATION FOR DELIVERY
  - 5.1 Preservation and packaging.-

### 5.1.1 Level A .-

- 5.1.1.1 <u>Preservation</u>.- All preservation shall be in accordance with the method and material requirements of MIL-P-116.
- 5.1.1.1.1 <u>Cleaning.- All</u> exposed, uncoated, ferrous metal surfaces of the machine, spare parts, and tools shall be cleaned method C-1.
- 5.1.1.1.2 Coating. The interior surfaces of the mixing bowl and agitator shall be coated with type P-14 preservative.
- 5.1.1.2.1 Chains. Chains, sprockets, gear, shaft, spring, clutch, dump worm, pulleys, and other bare metal parts of the driving mechanism shall be coated with type P-2 or P-6 preservative.
- 5.1.1.1.2.2 Oil can. The oil can shall have the interior and exterior surfaces of the can and spout coated with type P-7 preservative and the can and spout shall be wrapped with greaseproof barrier material conforming to type II, grade A, class 1 or 2 of MIL-B-121.

- 5.1.1.1.2.3 <u>Gasoline engine</u>.— The gasoline engine shall be preserved in accordance with the requirements for type II of MIL-E-10062. In addition, the exhaust pipe and muffler shall be coated with type P-1 preservative, and then secured in a compact coiled position to the engine with minimum 15 gage annealed wire.
- 5.1.1.1.3 <u>Lubrication</u>.- All fittings requiring lubrication shall be lubricated to capacity with the manufacturer's recommended lubricant.

## 5.1.1.1.4 Enclosures .-

- 5.1.1.4.1 <u>Handles and lubrication cups</u>.— The four handles, the knob, and the door catch shall be secured and all lubrication cups shall be sealed with pressure-sensitive tape conforming to class 1 of PPP-T-60.
- 5.1.1.4.2 <u>Mixing bowl</u>.- The mixing bowl shall be closed and adjusted to its upright position. The hinge and all other openings around the cover shall be sealed with pressure-sensitive tape as specified in 5.1.1.1.4.1.

## 5.2 Packing.-

- 5.2.1 <u>Level A.-</u> Each dough mixing machine, preserved and packaged as specified in 5.1, shall be packed upright in a cleated plywood shipping container conforming to overseas type, style B, type 3 load of PPP-B-601, with the container modified as specified in 5.2.1.1. The dough mixing machine shall be blocked and braced with wood and anchored by means of bolting in accordance with MIL-STD-1186, and the container strapped as specified in 5.2.1.2.
- 5.2.1.1 Shipping container. Each shipping container shall be provided with a fully sheathed skid base. The sheathing for the base shall be minimum 1/2-inch thick plywood. Two 2- by 6-inch skids shall be laid flat and secured to the bottom of the base, one flush with each end, with each skid extending beyond the base approximately 1-1/4-inch at each side. One- by 6-inch rubbing strips shall be secured to the bottom of each skid, extending full length of the skid. Two 2- by 4-inch headers, one at each side, shall be secured to the plywood base with nails and secured to the skids by bolting. The bolts shall be minimum 3/8-inch diameter carriage bolts provided with flat washers, lockwashers and nuts. The bolts shall pass through the skid, the plywood base and the header with the flat washer next to the header and the lockwasher and nut secured wrench-tight. The ends of the box shall be extended to 1/2-inch of the bottom of the skids and nailed thereto. The sides shall set on top of the ends of the skids and be nailed to the headers. Horizontal intermediate cleats only shall be used on the sides and ends with the side cleats in line with the end cleats. A minimum of three vent holes 3/8-inch diameter shall be drilled at an upwards angle through the uppermost horizontal filler cleat on each side.

- 5.2.1.2 Strapping. Each shipping container shall be strapped in accordance with the appendix of PPP-B-601, except that straps shall be applied only over the horizontal top, bottom, and intermediate cleats of the sides and ends.
- 5.3 Marking.- Interior packages and shipping containers shall be marked in accordance with MIL-STD-129.

#### 6. NOTES

- 6.1 Intended use. The dough mixing machine covered by this specification is intended for use in mixing dough for field garrison sheet bread.
  - 6.2 Ordering data. Procurement documents should specify the following:
    - (a) Title, number, and date of this specification.
    - (b) When a first article is required (see 3.2, 4.2, and 6.5).
    - (c) When fungus and moisture resistance treatment of electrical components is other than specified (see 3.5.1).
- 6.4 Engineering design conference.— The following information should be included in the invitation for bid: Within ten days after award of contract and prior to any work on the preproduction sample, including ordering of materials, the supplier shall request the contracting officer in writing to arrange am engineering design conference to discuss any questions concerning the details of Government drawings, instructions, and technical requirements of this specification. This conference is to assist the supplier in interpretation of the specification and agreements made shall neither obligate the Government to accept equipment that is not in accordance with this specification nor relieve the supplier of his obligation to supply the equipment specified.
- 6.5 First article.— When a first article is required, it shall be inspected and approved under the appropriate provisions of ASPR 7-104.55. The first article shall be the preproduction sample. The first article should consist of one unit. The contracting officer should include specific instructions in all procurement instruments regarding arrangements for inspection and approval of the first article.
- 6.6 The margins of this specification were marked with an asterisk (\*) to indicate where changes (additions, modifications, 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.

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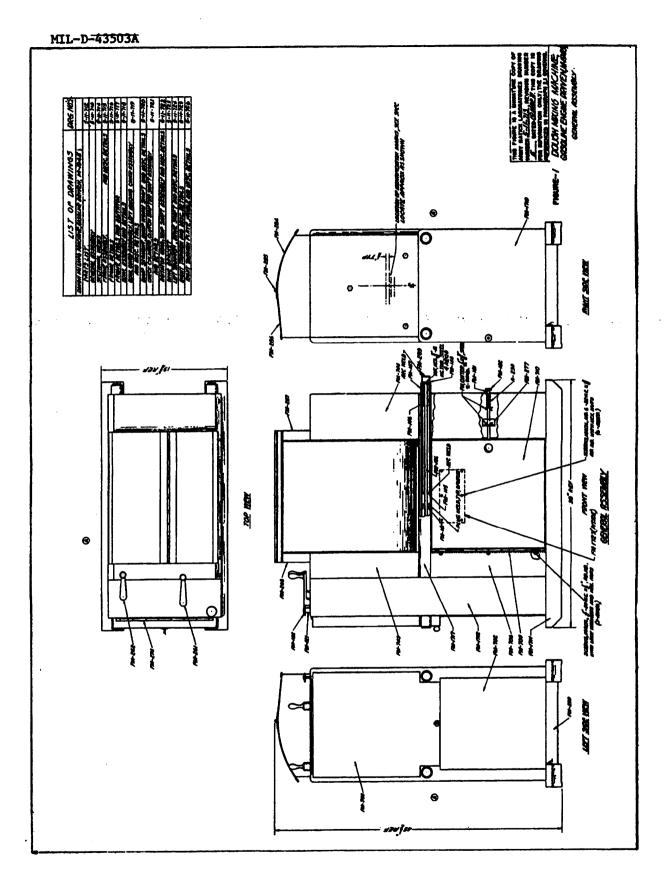
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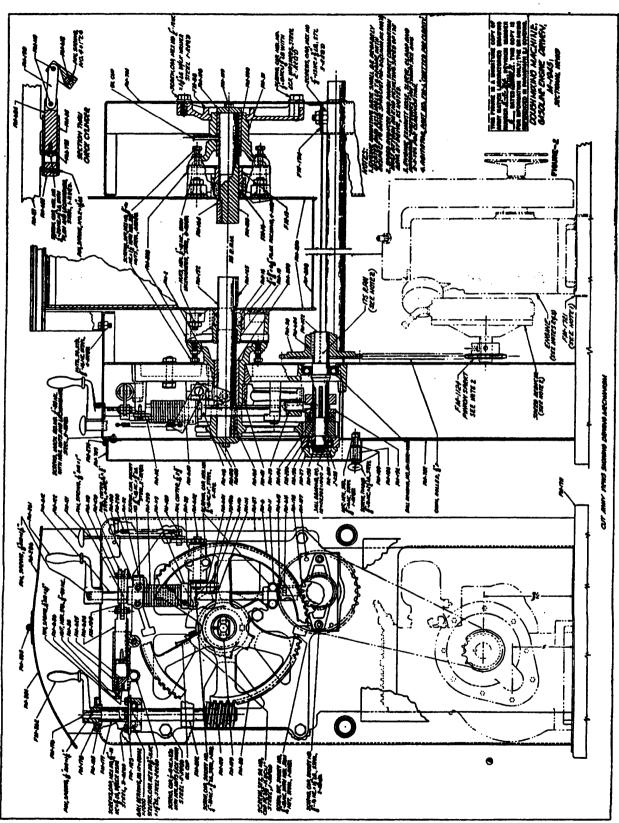
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