

GGG-B-351b

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SUPERSEDING

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Fed. Spec. GGG-B-351

February 13, 1952

FEDERAL SPECIFICATION**BINS, STORAGE AND DISPLAY, ROTARY**

This specification was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 Scope. The rotary storage and display bins covered by this specification are for the storage and display of tools and equipment parts. The type I bins are for use in general maintenance shops, field mobile shops, and base shops. The type II bins are generally for shipboard use.

1.2 Classification.

1.2.1 Types and sizes. The rotary storage and display bins covered by this specification shall be of the following types and sizes, as specified (see 6.2). The bins shall be furnished with the number of rotary shelves as specified (see 6.2).

Type I.—Solid circular base (fig. 1).

Size A.—17-inch diameter.

4, 5, 6, 7, or 8 shelves.

Size B.—28-inch diameter.

4, 5, 6, 7, 8, 9, or 10 shelves.

Size C.—34-inch diameter.

4, 5, 6, 7 or 8 shelves.

Type II.—With two tube fittings (fig. 2).

Size B.—28-inch diameter.

4, 5, 6, 7, 8, or 9 shelves.

2. APPLICABLE SPECIFICATIONS, STANDARDS, AND OTHER PUBLICATIONS

2.1 Specifications and standards. The following specifications and standards of the issue in effect on date of invitation for bids

form a part of this specification to the extent specified herein.

Federal Specifications:

PPP-B-585—Boxes, Wood, Wirebound.

PPP-B-591—Boxes, Fiberboard, Wood-cleated.

PPP-B-601—Boxes, Wood, Cleated-plywood.

PPP-B-621—Boxes, Wood, Nailed and Lock-Corner.

PPP-B-636—Box, Fiberboard.

PPP-B-640—Boxes, Fiberboard, Corrugated, Triple Wall.

Federal Standards:

Fed. Std. No. 102—Preservation, Packaging, and Packing Levels.

Fed. Std. No. 123—Marking for Domestic Shipment (Civilian Agencies).

Fed. Std. No. 187—Identification of Pressed Bends, Forms, Seams, and Joints, (Sheet Metal).

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications, Standards, and Handbooks and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

(Single copies of this specification and other product specifications required by activities outside

FSC 7125

GGG-B-351b

the Federal Government for bidding purposes are available without charge at the General Services Administration Regional Offices in Boston, New York, Washington, D. C., Atlanta, Chicago, Kansas City, Mo., Dallas, Denver, San Francisco, and Auburn, Wash.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications, Standards, and Handbooks from established distribution points in their agencies.)

Military Specifications:

- MIL-P-116—Preservation, Method of.
- MIL-P-197 — Preservation, Packaging, and Packing of Anti-Friction Bearings, Associated Parts and Sub-Assemblies.
- MIL-L-10547—Liners, Case, Waterproof.

Military Standards:

- MIL-STD-105 — Sampling Procedures and Tables for Inspection by Attributes.
- MIL-STD-109—Inspection Terms and Definitions.
- MIL-STD-129—Marking for Shipment and Storage.
- MIL-STD-130—Identification Marking of U. S. Military Property.

(Copies of Military Specifications and Standards required by contractors in connection with specific procurement functions should be obtained from the procuring agency 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 shall apply.

Steel Products Manual.

(Copies may be obtained from American Iron and Steel Institute, 350 Fifth Avenue, New York 1, New York.)

National Bureau of Standards Handbook:
H28—Screw-Thread Standards for Federal Services.

(Copies may be obtained upon application, accompanied by money order or cash, to the Superintendent

of Documents, U. S. Government Printing Office, Washington 25, D. C.)

3. REQUIREMENTS

3.1 Preproduction sample. When specified, (see 6.2) before production is commenced, a sample of the finished commodity shall be submitted or made available for approval to the contracting officer or his authorized representative for design, construction, workmanship, and appearance. The approval of the preproduction sample does not relieve the contractor of responsibility from compliance with all other applicable provisions of this specification. The approved preproduction sample shall be used as a guide throughout production under the contract.

3.2 Illustrations. The illustrations shown herein are intended for convenience of identification and are not intended to preclude the purchase of rotary storage and display bins which are otherwise in accordance with the requirements of this specification.

3.3 Material.

3.3.1 Steel. Steel used in the fabrication of the storage and display bins shall be of commercial quality cold rolled with a stretcher-leveled standard of flatness, cold-rolled oiled, hot-rolled pickled and oiled, or hot-rolled annealed. Stretcher-leveled standard of flatness is defined in table 24 of Steel Products Manual. The steel shall be bright, smooth; free from rust, scale, pits, scratches, laps, crimps, and buckles affecting strength.

3.3.1.1 Castings. All castings shall be of uniform quality, free of blowholes, porosity, hard spots, shrinkage, cracks or other injurious defects. Strength and other essential physical properties of the castings shall be adequate throughout for the purpose intended.

3.3.2 Hardware.

3.3.2.1 Fastening devices. Screws, pins, bolts, and similar fastening devices shall be

made rust resistant by means of electro-galvanizing or by zinc, chromium, or cadmium plating and shall be furnished or installed with a positive means of protection against their working loose due to vibration whenever practical. Threads of such parts subject to removal or adjustments shall not be swaged, peened, staked, or otherwise permanently secured.

3.4 Design and construction.

3.4.1 General. The rotary storage and display bins shall be so designed and constructed that a section fully loaded with items normally stored or displayed in such bins will not tip or bend out of shape. Welds shall be sound and without porosity. Exposed spot and projection welds shall be filled and ground smooth, however, welding, brazing, and soldering operations shall not be resorted to as repair measures. Bending, flanging, drawing, forming, and similar operations shall be performed in a manner to insure that there are no ruptures, cracks, unsightly wrinkles, or other defects. Exposed parts shall be rounded, smoothed, and finished to eliminate sharp edges.

3.4.2 Interchangeability. All rotary storage and display bins furnished in the same types and sizes specified herein and on any one contract, including parts and components shall be identical for assembly in various combinations.

3.4.3 Threads. Straight screw threads and tapered pipe threads shall be in accordance with applicable requirements of the National Bureau of Standards Handbook H28.

3.4.4 Type I, size A. The type I rotary storage and display bins shall be generally in accordance with figure 1 except as noted herein. The assembly for the size A bins shall include the following component parts: One base, one tube column, and shelf sections complete with bin dividers, bin front label holders and removable dividers in the quantities specified (see 6.2).

3.4.4.1 Base. The solid circular base shall be made either of steel plate or cast iron

and shall be of sufficient size and weight to support a uniformly and fully loaded assembly and to permit revolving of the shelves without evidence of tilting, deflecting, breaking, or any other defect. When specified (see 6.2), four holes shall be provided for securing base to floor or bench.

3.4.4.2 Tube column. The tube shall be steel mechanical tubing of 0.10 to 0.20 percent carbon. The tube shall be at least 0.750-inch outside diameter and at least 0.0625 inch in wall thickness. The tube shall be provided with suitable holes for at least 1/4-inch-diameter steel pins uniformly spaced on approximately 4-inch centers, providing secure positions for assembly of rotating shelf sections.

3.4.4.3 Shelf sections. Each shelf section shall include a bottom plate of steel not less than 0.0239 inch thick and 17 inches diameter flanged upward not less than 3/8 inch with a 90-degree flange as illustrated in Fed. Std. No. 187, with corrugation or groove approximately 1-1/2 inches from and parallel with outer edge. A center hub of steel not less than 0.023 inch thick, approximately 2 inches in outside diameter and 3 inches high shall be permanently attached to the bottom plate. The hub shall be constructed to fit over the center tube and to provide a bearing retainer for suitably greased hardened-steel ball bearings. Each shelf section shall have four compartments, each approximately 13 inches wide at the face, 3 inches high by 7-1/2 inches deep, formed by four dividers permanently attached to the section bottom plate and to the center hub. Suitable means of retention of removable dividers, spaced not more than 3-1/4 inches center-to-center at outer margin of shelf section bottom shall be provided. The shelf sections shall be furnished with bin front and label holder combination.

3.4.4.4 Fixed bin dividers. The fixed bin dividers shall be permanently attached to the center hub and bottom plate of shelf sections. The outer end of the fixed dividers shall be curved with the outer top corner

GGG-B-351b

with a radius of approximately 5 inches. The fixed bin dividers shall be of steel not less than 0.020 inch thick, approximately 3 inches high by 7-1/2 inches long, straight to 5-inch radius, outer top corner. The top edge shall be smooth.

3.4.4.5 Removable bin dividers. The removable bin dividers shall have provisions for rigid and secure attachment. The outer top corner shall have an approximate 5-inch radius. The removable bin dividers shall be of steel not less than 0.020 inch thick, approximately 3 inches high by 7-1/2 inches long. The top edge shall be smooth.

3.4.4.6 Bin fronts. The bin fronts shall be either of the fixed or removable type and shall be of steel not less than 0.0239 inch thick. The bin front shall be of a continuous type suitable for labels and check holders not less than one inch wide. The bin fronts shall be either of the bolted or boltless type and shall be rigidly attached to the shelf.

3.4.5 Type I, size B. The assembly for type I, size B rotary storage and display bins shall include the following component parts: One tube column and solid circular base, shelf sections complete with bin dividers and bin front label holders, drawer units, containers, removable bin dividers and check holders in the quantities specified (see 6.2).

3.4.5.1 Base. The base shall be as specified in 3.4.4.1.

3.4.5.2 Tube column. The tube shall be steel mechanical tubing of 0.10 to 0.20 percent carbon. The tube shall be at least 2.250 inches outside diameter and have at least 0.093-inch wall thickness. The tube shall be provided with suitable holes for at least 3/8-inch-diameter pins on approximately 6-1/4-inch centers, providing secure positions for assembly of rotating shelf sections.

3.4.5.3 Shelf sections. Each shelf section shall include a bottom plate of steel not less than 0.0329 inch thick and 28 inches diameter, flanged up 3/8 inch at a 90 degree an-

gle with a corrugation or groove as specified in 3.4.4.3. A center hub of steel not less than 0.0418 inch thick and not less than 5-1/2 inches high shall be permanently attached to the bottom plate. The hub shall be constructed to fit over center tubing and to provide a bearing retainer for suitably greased, hardened-steel ball bearings. The shelf section shall have six compartments, each approximately 14 inches wide at face, 5-1/2 inches high by 12 inches deep, formed by six dividers permanently attached to the bottom plate and to center hub. In addition, a divider locator for removable dividers shall be a part of, or securely attached to, center hub. Suitable means of retention of removable dividers, spaced not more than 3-1/2 inches center to center at outer margin of shelf section bottom shall be provided.

3.4.5.4 Fixed bin dividers. The fixed bin dividers shall be permanently attached to the center hub and bottom plate of shelf sections. The outer end of the fixed bin dividers shall provide rigid attachment for bin fronts, and shall have a radius at outer top corner not less than 3-1/2 inches nor more than 5-1/2 inches. The fixed bin dividers shall be of steel not less than 0.0329 inch thick, approximately 12 inches long. The top edge shall be rolled or beaded.

3.4.5.5 Removable bin dividers. The removable bin dividers shall have provision for rigid and secure attachment to the center hub, bottom plate, and/or outer margin. The outer top corner shall have a radius not less than 2 inches nor more than 5-1/2 inches. The removable bin dividers shall be of steel not less than 0.0239 inch thick, approximately 4-1/2 inches high by 12 inches long. The top edge shall be rolled or beaded.

3.4.5.6 Removable bin fronts. The removable bin fronts shall be of the bolted or boltless type and shall be rigidly attached to the edge of the shelf-section bottom and to the fixed dividers. Each bin front shall be, or be provided with, a continuous-type label holder suitable for labels and check holders not less than 1 inch wide. The removable bin

front shall be of steel not less than 0.0239 inch thick, approximately 1-1/2 inches wide by 14 inches long.

3.4.5.7 Drawer units. Each drawer unit shall consist of a tier of triangular drawers. The drawers shall be of steel not less than 0.0239 inch thick. Each drawer shall be provided with suitable label holders and a convenient handle. The drawer case shall be of steel not less than 0.025 inch thick. A drawer stop shall be provided. The drawer case shall fit into the compartment of the shelf section.

3.4.5.7.1 Two-drawer units. Each two-drawer unit shall consist of two triangular drawers and one drawer case. Each drawer shall be approximately 2-1/2 inches high and shall have not less than 12 compartments. Eight compartments shall be adjustable for size by means of removable dividers. Each compartment shall be provided with label holders. The drawer case shall not exceed an overall height of 6 inches.

3.4.5.7.2 Three-drawer units. Each three-drawer unit shall consist of a tier of three triangular drawers and one drawer case. The drawer shall be as specified in 3.4.5.7.1 with the exception that each drawer shall be approximately 1-3/4 inches high.

3.4.5.8 Containers. The containers shall be triangular shaped, open-top-pan type to fit into and form compartments of the shelf sections. Containers shall be of steel not less than 0.0239 inch thick, and shall be provided with suitable label holders and a convenient handle. Containers shall be constructed in two widths of approximately 7 inches and 14 inches at the face, each approximately 5-1/2 inches high by 12 inches long.

3.4.6 Type I, size C. The assembly for type I, size C rotary storage and display bins shall include the component parts listed in 3.4.5 for size B cases; the quantities of shelf sections, drawer units, containers, removable bin dividers and check holders being as specified (see 6.2).

3.4.6.1 Base. The base shall be as specified in 3.4.4.1.

3.4.6.2 Tube column. The tube column shall be as specified in 3.4.5.2 except the spacing of the pins shall be on approximately 7-3/4 inch centers.

3.4.6.3 Shelf sections. Each shelf section shall include a bottom plate of steel not less than 0.0418 inch thick and 34 inches diameter, flanged up 3/8 inch at a 90 degree angle and having a corrugation or groove as specified in 3.4.4.3. A center hub of steel not less than 0.0418 inch thick, approximately 3-5/8 inches in outside diameter and 7 inches high, shall be permanently attached to the bottom plate. The hub shall be constructed to fit over center tubing and to provide a bearing retainer for suitably greased hardened-steel ball bearings. The shelf section shall have five compartments, each approximately 21 inches at the face, 7 inches high by 15 inches deep, formed by five dividers permanently attached to the section bottom plate and to center hub; in addition a divider locator for removeable dividers shall be a part of, or shall be securely attached to center hub. Suitable means of retention of removable dividers, spaced not more than 3-1/2 inches center to center at outer margin of shelf section bottom, shall be provided.

3.4.6.4 Fixed bin dividers. The fixed bin dividers shall be as specified in 3.4.5.4 except they shall be approximately 7 inches high by 15 inches long.

3.4.6.5 Removable bin dividers. The removable bin dividers shall be as specified in 3.4.5.5 except they shall be at least 0.0329 inch thick and approximately 5 inches high by 15 inches long.

3.4.6.6 Removable bin fronts. The removable bin fronts shall be as specified in 3.4.5.6 except they shall be approximately 2 inches wide by 21 inches long.

3.4.6.7 Drawer units. Each drawer unit shall consist of a tier of triangular drawers.

GGG-B-351b

The drawers shall be of steel not less than 0.025 inch thick. Each drawer shall be provided with suitable labels and a convenient handle. The drawer case shall be of steel not less than 0.025 inch thick. A drawer stop shall be provided. The drawer case shall fit into the compartment of the shelf section.

3.4.6.7.1 Two-drawer units. Each two-drawer unit shall consist of two triangular drawers and one drawer case. Each drawer shall be approximately 3-1/8 inches high and shall have 19 compartments. Fourteen compartments shall be adjustable for size by means of removable dividers. Each compartment shall be provided with label holders. The drawer case shall not exceed an overall height of 6-3/4 inches.

3.4.6.7.2 Three-drawer units. Each three-drawer unit shall consist of a tier of three triangular drawers and one drawer case. The drawer shall be as specified in 3.4.6.7.1 except that each drawer unit shall be approximately 2 inches high.

3.4.6.8 Containers. The containers shall be as specified in 3.4.5.8 except they shall be constructed in two widths of approximately 10-1/2 inches and 21 inches at the face, each not less than 6 inches high by approximately 15 inches in depth.

3.4.7 Type II, size B. The type II, size B rotary storage and display bin (fig. 2) shall be generally in accordance with type I, size B bins except two tube fittings shall be furnished in lieu of a solid circular base and the exceptions specified in 3.4.7.2, 3.4.7.6 and 3.4.7.7 shall apply. The assembly shall include the following component parts: One tube column with two fittings; and shelf sections complete with bin dividers and bin front label holders, drawer units, containers, removable bin dividers and check holders in the quantities specified (see 6.2).

3.4.7.1 Tube column. The tube column shall be as specified in 3.4.5.2 with the addition of the two fittings referenced in 3.4.7.

The fittings shall be constructed of steel plate or cast iron and shall be attached to each end of center tube column with suitable holes for securing the tube fittings to a permanent top and floor structure. The tube fittings shall be designed and constructed to permit the removal of the center tube column and shelves, and to prevent rotation of tubing when in use.

3.4.7.2 Shelf sections. The shelf sections shall be in accordance with 3.4.5.3 except a locking device to prevent rotation of each shelf section shall be provided.

3.4.7.3 Fixed bin dividers. The fixed bin dividers shall be as specified in 3.4.5.4

3.4.7.4 Removable bin dividers. The removable bin dividers shall be as specified in 3.4.5.5

3.4.7.5 Removable bin fronts. The removable bin fronts shall be as specified in 3.4.5.6.

3.4.7.6 Drawer units. The drawer units shall be as specified in 3.4.5.7 with the following additional requirement: A simple locking device shall be provided to prevent each drawer from sliding open when not in use.

3.4.7.7 Containers. Containers shall be as specified in 3.4.5.8 except the height shall be not less than 5 inches, and no 7-inch-width containers are to be furnished. Lightning holes 1/2 inch in diameter, spaced 3/4 inch center-to-center for reducing weight shall be provided on type II containers.

3.5 Pretreatment and finishing.

3.5.1 Pretreatment. All exterior and interior metal surfaces shall be thoroughly cleaned of all grease, oil, scale, rust, and other extraneous matter.

3.5.2 Finishing. The cleaned surfaces shall be coated with at least one coat of enamel and baked as recommended by the enamel manufacturer. Unless otherwise specified (see 6.2), the enamel and color

of finish shall be the manufacturer's standard. The finish shall level out to produce smooth, uniform exposed surfaces without runs, wrinkles, grits, areas of thin film or no film, and separation of color.

3.6 Identification marking. Unless otherwise specified (see 6.2), each storage and display bin shall be marked in a permanent and legible manner with the manufacturer's name or trademark of such known character that the source of manufacture can be readily determined. When specified, equipment, assemblies, and parts shall be marked for identification in accordance with MIL-STD-130.

3.7 Publications. Publications or manuals shall be furnished, containing complete information necessary for the successful use, assembly, and maintenance of the equipment, and a complete list of replaceable parts. A copy of the publication shall be packed with each rotary storage and display bin unit in a manner to prevent loss during transit or unpacking.

3.8 Workmanship. The workmanship shall be of the quality necessary to provide rotary storage and display bins of good appearance and possessing the essential characteristics found in high grade commercial quality items of this nature. There shall be no sharp corners, burrs, and other surfaces which might be hazardous to using personnel.

4. SAMPLING, INSPECTION, AND TEST PROCEDURES

4.1 Inspection responsibility. The supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own or any other inspection facilities and services acceptable to 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 that supplies and services conform to prescribed requirements.

4.2 Sampling for inspection and acceptance. Sampling for inspection and acceptance shall be performed in accordance with the provisions set forth in MIL-STD-105, except where otherwise indicated. The inspection terms and definitions shall be interpreted in accordance with MIL-STD-109.

4.2.1 Component and material inspection. In accordance with 4.1, the supplier is responsible for insuring that components and materials used are manufactured, tested and inspected in accordance with the requirements of referenced subsidiary specifications and standards to the extent specified, or if none, in accordance with this specification.

4.3 End item inspection.

4.3.1 Visual examination. Examination of the bins shall be in accordance with the classification of defects and acceptable quality levels (AQL's) specified in table I. The lot size shall be expressed in units of bins for the purpose of determining the sample size in accordance with MIL-STD-105. The sample unit for this examination shall be one completely fabricated bin.

TABLE I.—Classification of defects in accordance with MIL-STD-105

Examine	Defect	Classification	
		Major	Minor
Finish	Not color specified		X
	Peeling, blistered, discolored, has sags or runs or area of thin film or no film		X
Construction, material and workmanship	Bins not constructed or designed so that they can be assembled in various combinations	X	
	Rotary storage bins not readily accessible for adjustment and repair ..	X	
	Iron castings contain blow holes, porosity or cracks	X	
	Functioning surfaces or rotary storage bins rough or burred	X	

GGG-B-351b

TABLE I.—Classification of defects in accordance with MIL-STD-105 (con't)

Examine	Defect	Classification		
		Major	Minor	
Construction, material and workmanship (cont'd)	Tool mark on exteriors of assembled parts		X	
	Exposed parts not rounded, not smooth or have sharp edges	X		
	Welding, brazing or soldering not sound	X		
	Weld flux or spatter not removed		X	
	Any component repaired by welding, brazing or soldering		X	
	Threads of fastening devices subject to removal or adjustment swaged, peened, staked or otherwise permanently secured	X		
	Any component missing	X		
	Any component not of the design, material or not attached and assembled as specified		X	
	Locking device of shelf section does not prevent rotation		X	
	Shelf sections do not rotate freely around center tube	X		
	Suitable means of retention of removable dividers not provided		X	
	Locking device does not prevent drawer from sliding open. (Sizes B and C)		X	
	Publication or manual	Missing, not complete or not as specified		X
	Identification marking	Missing, illegible, incomplete or not permanent type		X

4.3.1.1 *Dimensional examination.* Inspection will be made of bins for compliance with dimensions specified. Any deviation therefrom shall constitute a defect.

4.3.1.2 *Inspection levels and AQL's.* The acceptable quality levels (AQL's) expressed in defects per 100 units, and inspection levels shall be as follows:

For examination in	Inspection level	AQL's	
		Major	Total
Table I	II	4.0	6.5
4.3.1.1. (1 class)	L-4	—	4.0

4.3.2 *Examination of preparation for delivery.* An examination shall be made to determine that preservation and packaging, packing, and marking requirements as required by section 5 of this specification are complied with. Defects shall be scored in accordance with table II. For examination of contents the sample unit shall be one shipping container fully prepared for delivery selected just prior to the closing operations. Defects of closure listed shall be examined on shipping container fully prepared for delivery. The lot size shall be the number of shipping containers in the end item inspection lot. The inspection level shall be L4 and the acceptable quality level shall be 4.0 defects per hundred units.

TABLE II.—Classification of defects in accordance with MIL-STD-105

Examine	Defect
Markings (exterior & interior containers)	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application.
Materials	Any component missing, or damaged.
Workmanship	Inadequate application of components such as: Incomplete closure of container, loose strapping, inadequate stapling. Bulging or distortion of containers.
Contents	Number of intermediate packages is more or less than required.
Preservation	Improperly applied or missing.

5. PREPARATION FOR DELIVERY

For civil agency procurement, Fed. Std. No. 102 should be referred to for definitions and applications of the various levels of preservation, packaging, and packing.

5.1 Preservation and packaging. Preservation and packaging shall be level A, B, or C, as specified (see 6.2).

5.1.1 Level A.

5.1.1.1 Disassembly. Shelf sections, with detachable components removed, shall be disassembled from the tube column. All bolts, nuts, and washers removed shall be placed in mating parts and shall be secured to prevent their loss.

5.1.1.2 Unprotected metal surfaces. Exterior unprotected metal surfaces requiring the application of a contact preservative shall be coated with type P-1 preservative conforming to the applicable specification listed in, and shall be applied in accordance with MIL-P-116.

5.1.1.3 Removable bearings. Steel ball bearings shall be preserved and packaged in accordance with MIL-B-197.

5.1.1.4 Technical publications. Technical publications and manuals shall be preserved in accordance with MIL-P-116, method IC-1.

5.1.1.5 Packaging. The disassembled and detached components of the rotary bin requiring the additional protection of interior packages shall be packaged in boxes conforming to PPP-B-636, class 2, V3c, style optional. The gross weight of each box shall not exceed the weight limitation of the box specification. The boxes shall be closed and sealed in accordance with the appendix to the box specification.

5.1.2 Level B. The rotary bin shall be disassembled as specified in 5.1.1 and the following:

5.1.2.1 Unprotected metal surfaces. Coating of unprotected metal surfaces with a contact preservative shall not be required.

5.1.2.2 Removable bearings. Removable steel ball bearings shall not be removed except as required by disassembly. The installed bearing shall be coated with a lubricative oil or grease specifically recommended by the manufacturer for this application. Bearings removed as a result of disassembly shall be coated with the lubricating oil or grease specified herein, placed in a grease proof acid free paper bag and the bag sealed.

5.1.2.3 Technical publications. Technical publications and manuals shall be packaged in an end opening kraft envelope.

5.1.2.4 Packaging. The disassembled and detached components of the rotary bin requiring the additional protection of interior packages shall be packaged in boxes conforming to PPP-B-636, type I or II, class 1, style optional. The boxes shall be closed and sealed in accordance with the appendix to the box specification.

5.1.2 Level C. The rotary bin shall be preserved and packaged in accordance with the manufacturer's commercial practice.

5.2 Packing. Packing shall be level A, B, or C, as specified (see 6.2).

5.2.1 Level A. Each complete rotary bin disassembled and packaged as specified in 5.1.1 with manual shall be packed in one of the following containers at the option of the contractor.

PPP-B-621, class 2, style 2 or 4,

PPP-B-601, overseas type,

PPP-B-585, class 3,

PPP-B-640, grade A, class 2,

PPP-B-591, overseas type,

Each container shall be provided with a waterproof case liner fabricated and sealed in accordance with MIL-L-10547. Sealed case liners shall not be required for fiberboard boxes when the boxes are sealed with tape against entry of water or dust in accordance with the appendix to the box specification.

GGG-B-351b

Sealing, closure and strapping shall be in accordance with the appendix to the applicable box specification.

5.2.2 Level B. Each complete rotary bin shall be packed as specified in 5.2.1 except that the containers shall be class 1, domestic type and application and waterproofing with a sealed case liner or tape shall not be required.

5.2.3 Level C. The rotary bins shall be packed to insure carrier acceptance and safe delivery to destination in containers complying with the rules and regulations applicable to the mode of transportation.

5.3 Marking.

5.3.1 Civil agencies. In addition to markings required by the contract or order, the interior packages and shipping containers shall be marked in accordance with Fed. Std. No. 123.

5.3.2 Military activities. In addition to markings required by the contract or order, the interior packages and shipping containers shall be marked in accordance with MIL-STD-129.

6. NOTES

6.1 Intended use. Type I, size A bins are generally bench mounted and are used for either the storage or display of tools or small parts. Type I, sizes B and C bins are generally floor mounted and are used for either storage or display of tools and equipment parts, in maintenance and other shops. Type II bins are generally for shipboard use. Types I and II bins are intended to facilitate the storage, selection and issuance of small parts, tools, etc.

6.2 Ordering data. Purchasers should exercise any desired options offered herein, and procurement documents should specify the following:

- (a) Title, number, and date of this specification.
- (b) Type, size, and number of shelves required (1.2.1).

- (c) If preproduction sample is required (3.1).
- (d) Shelf section accessories required and quantities thereof (3.4.4., 3.4.5., 3.4.6. and 3.4.7.).
- (e) If four fastening holes required in type I base (3.4.4.1).
- (f) Enamel and color of finish requirements, if different (3.5.2).
- (g) If special marking is required (3.6 and 5.3).
- (h) Inspection record details (4.1).
- (i) Level of packing and packaging required (5.1 and 5.2).

6.3 Federal specifications do not include all types and sizes of the commodities indicated by the titles of the specifications, or all those commercially available, but are intended to cover those commodities generally procured by the Federal Government.

6.4 Transportation description. Transportation descriptions and minimum weights applicable to this commodity are:

Rail:

Bins, steel, not otherwise indexed by name (specify setup or knocked down flat)

Setup—In cars 40'0" or less in length inside measurements — 10,000, 12,000, 15,000, 18,000, 22,000 and 30,000 pounds.

In cars exceeding 40'9" in length, inside measurements — 16,000, 18,000, 21,000, 24,000, 30,000 and 40,000 pounds

Knocked down flat—36,000 pounds.

Motor:

Bins, steel, not otherwise indexed (specify setup or knocked down flat)

Truckload minimum weights:

Setup—10,000, 12,000, 15,000, 18,000, 22,000 and 30,000 pounds, subject to Rule 115, National Motor Freight Classification.

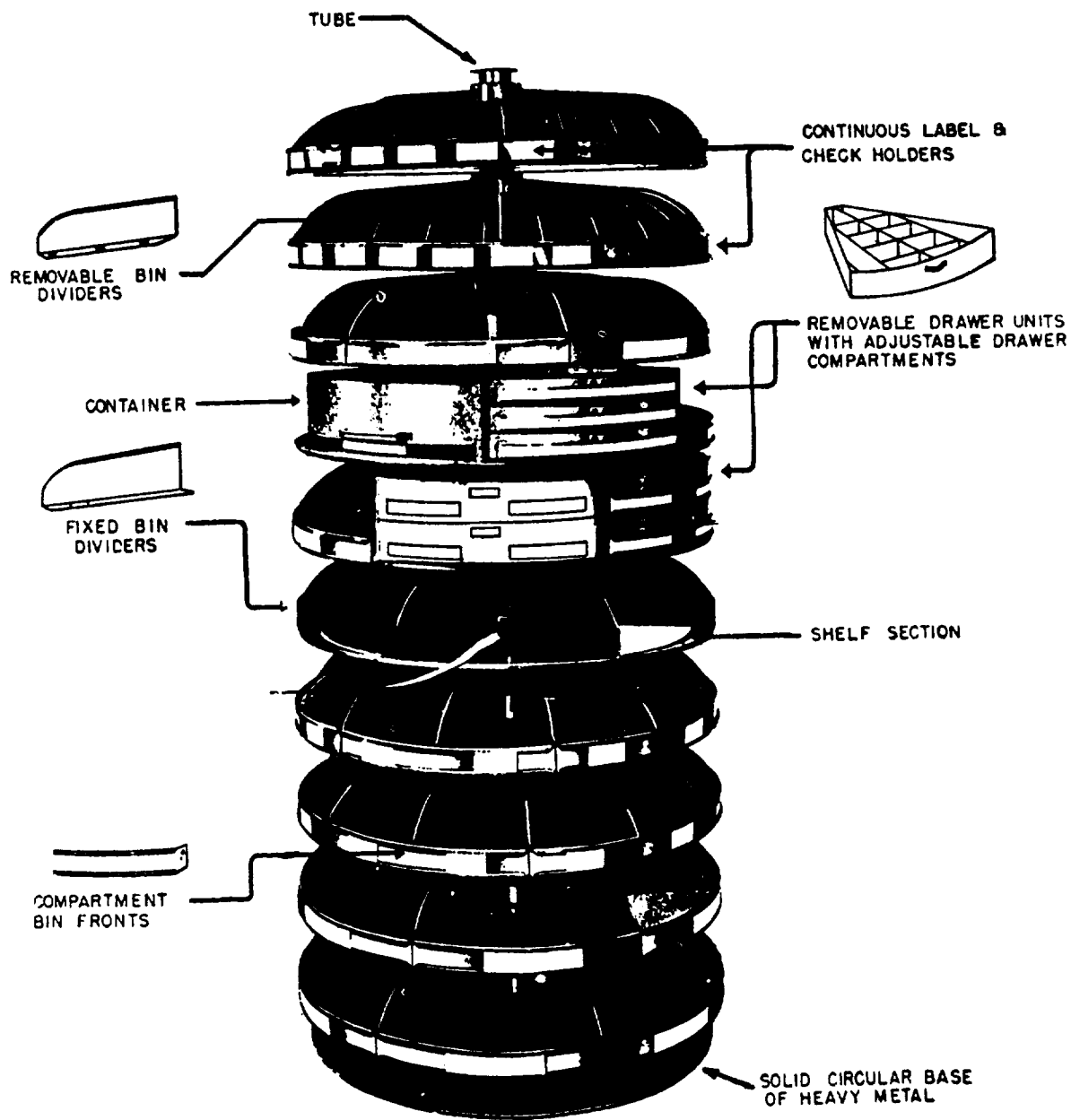
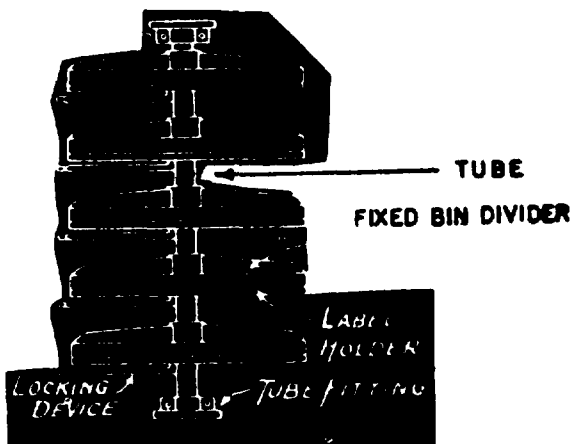


FIGURE 1.—Type I solid circular base.

GGG-B-351b

**Knocked Down Flat—36,000 pounds,
subject to Rule 115, National Motor
Freight Classification.**

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**FIGURE 2.—Type II rotary storage bin with
two tube fittings.**