



DEMPSTER BROTHERS

DEMPSTER[®]
DUMPSTER
SYSTEMS

CATALOG BRIEF 160



AMERICA'S LEADING SYSTEM OF MECHANIZED WASTE DISPOSAL...

THE **DEMPSTER DUMPSTER**® SYSTEM

Dempster Brothers originated the DEMPSTER-DUMPSTER System of Waste Disposal and Materials Handling in 1936. It has been conservatively estimated that this System has saved American and foreign industry more than 100 million dollars in the ensuing years. However, many firms believe that the improvements in plant cleanliness, sanitation and efficiency, wrought by the System, have been an even more important contribution to industry.

The users of the DEMPSTER-DUMPSTER Systems are numbered in the thousands, and the list of small, medium-sized and large firms employing it reads like "The Blue Book of American Industry."

The DEMPSTER-DUMPSTER System includes several different types of equipment, in addition to the standard LFW and DTLF models, which pick up, haul and dump detachable containers.

Another type of equipment included in the System is the DEMPSTER-DUMPMAS-TER self-loading packer, which handles containers from one-half through eight cu. yds. Rather than haul the containers to the disposal area,

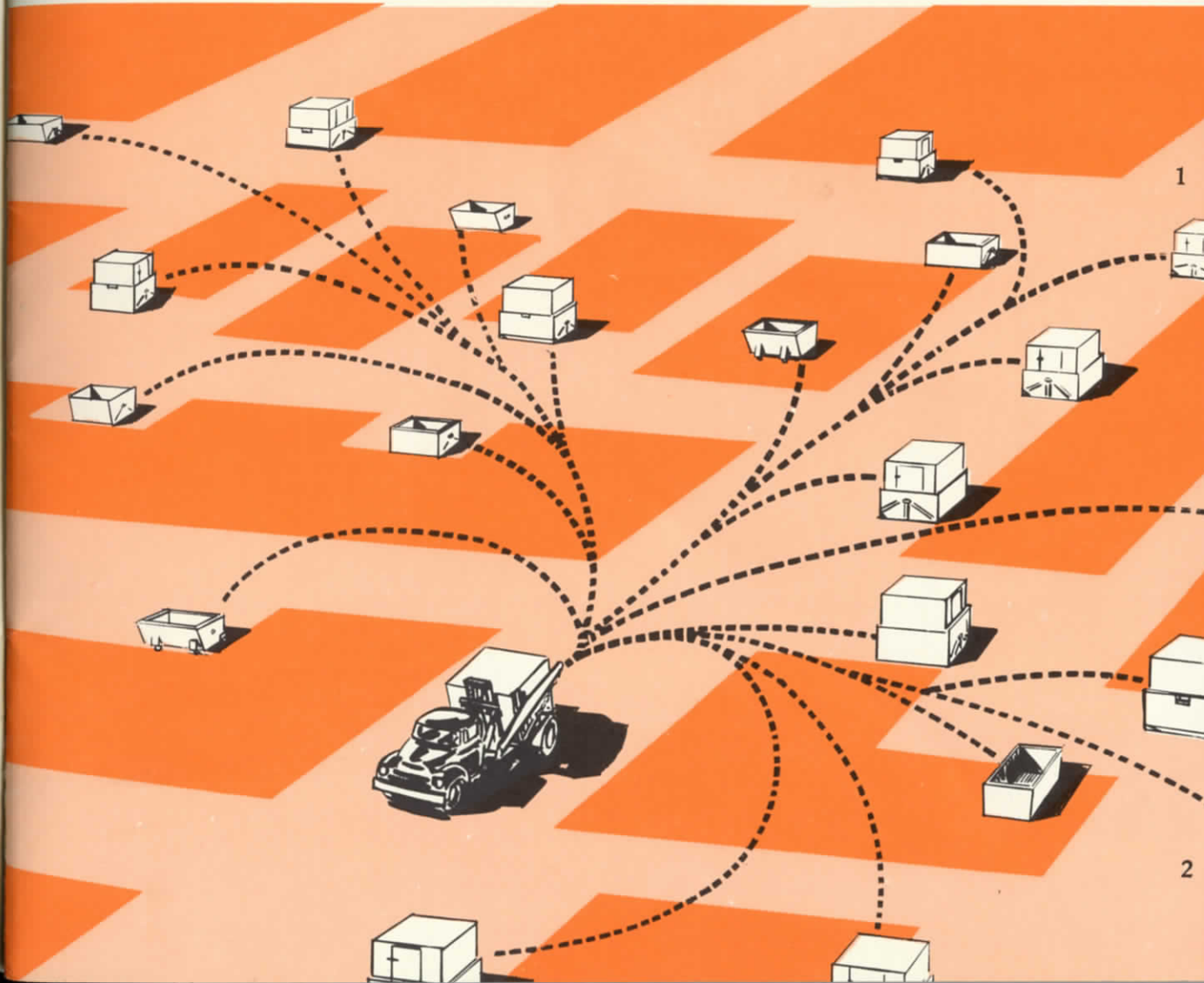
the Dumpmaster empties the containers into its body and hydraulically compresses the material to a fraction of its former volume.

A third form of the DEMPSTER-DUMP-STER System is the GRD-Packer Trailer team, which is used for heavy volume and long hauls. The DEMPSTER-DUMPSTER GRD, with its high dumping action, can empty containers with up to 15 cu. yd. capacities over the sides of the DEMPSTER COMPACTION TRAILER, which can receive and compact the equivalent of up to 200 cu. yds. of loose refuse before moving to the disposal area.

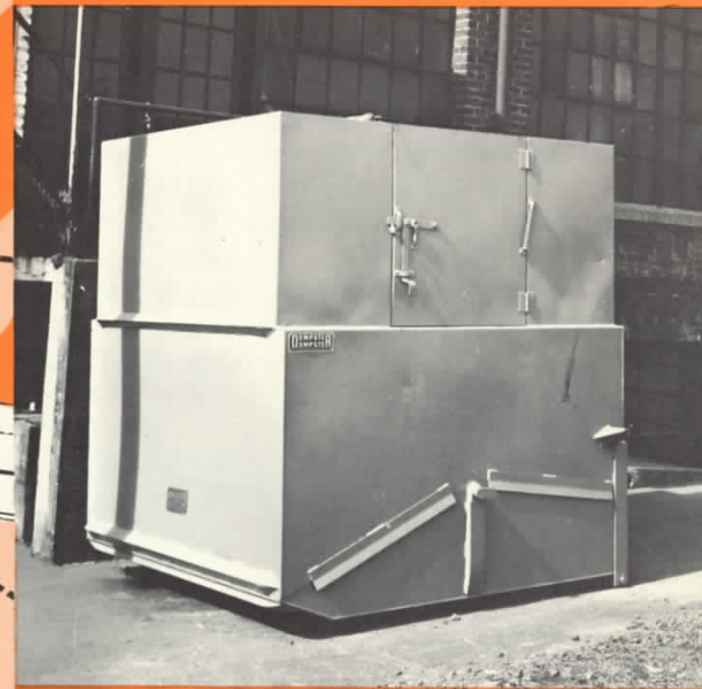
The latest addition to the System is the Dinosaur, which handles mammoth containers up to 40 cu. yds. and over, with gross loads up to 15 tons, for large quantities of refuse, scrap metal, and other heavy materials and cargo. Lifting capacity is limited only by the size of truck available.

All of these branches of the DEMPSTER-DUMPSTER System have two things in common: one-man operation of the equipment and use of detachable containers.

ONE TRUCK-MOUNTED **DEMPSTER DUMPSTER**® SERVES MANY DETACHABLE CONTAINERS



BEFORE Dempster-Dumpster System



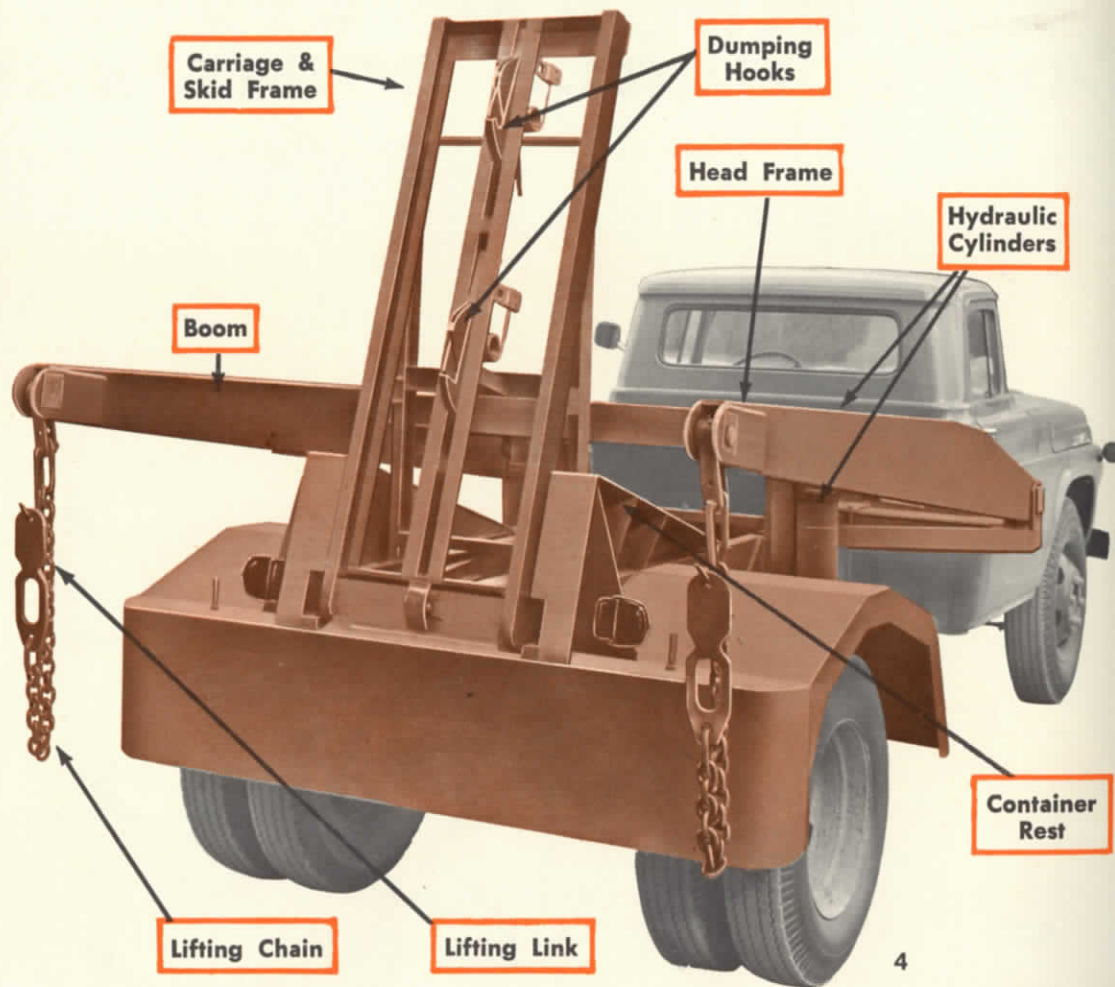
AFTER Dempster-Dumpster System



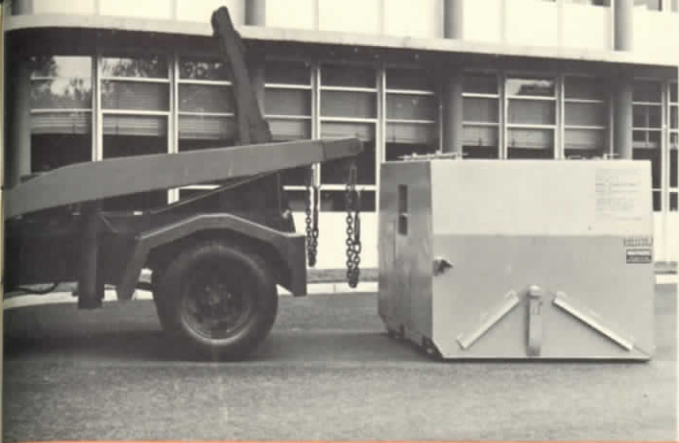
Shown above is the **DEMPSTER-DUMPSTER LFW 503-C**, mounted on a tandem chassis. This model has a capacity of 15,000 lbs. and is used for handling dense, heavy materials.

The **DEMPSTER-DUMPSTER Type LFW** can be mounted on any standard truck chassis. It is comprised of one sub-frame, three hydraulic cylinders, one boom assembly and one carriage. Two of the hydraulic cylinders raise and lower the boom; the other hydraulic cylinder moves the carriage forward and rearward. Being a simple, self-contained, hydraulically-operated mechanism, it lasts for many years with very little maintenance or repair. As trucks become obsolete, it can be removed and put on a new chassis. All lifting and dumping functions are operated from simple controls in the truck cab. There are seven basic LFW models, with payload capacities ranging from 6,000 to 38,000 lbs. Larger sizes are available on special order.

THE **DEMPSTER**[®] **TYPE LFW**



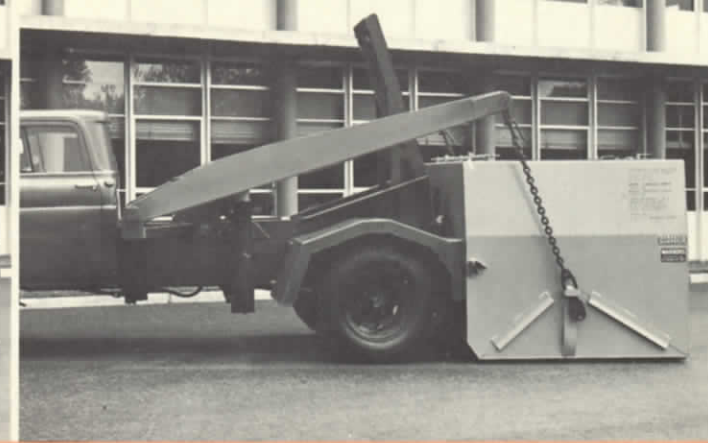
SKID FRAME VARIATIONS. A low clearance telescopic skid-frame type for operation under low-clearance conditions is available. There is also a low-clearance fixed type. For high elevation dumping, a standard height skid-frame with an elevating section is available.



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HOW IT WORKS

The simple operation of a Dempster-Dumpster can quickly be mastered by any experienced truck driver. Here is how it works: Photo 6, driver backs up to container. Photo 7, dismounting from the cab, he attaches the boom-arm chains to lifting pins on each side of the container. Photo 8, from hydraulic controls in the cab, driver raises booms and lifts container up the skid frame. When the sloping container rest is cleared, a horizontal cylinder moves skid-frame forward and brings container into carrying position. Booms are then lowered and exert a positive locking action on container's boom-rest angle brackets. This holds the container securely in place during travel as

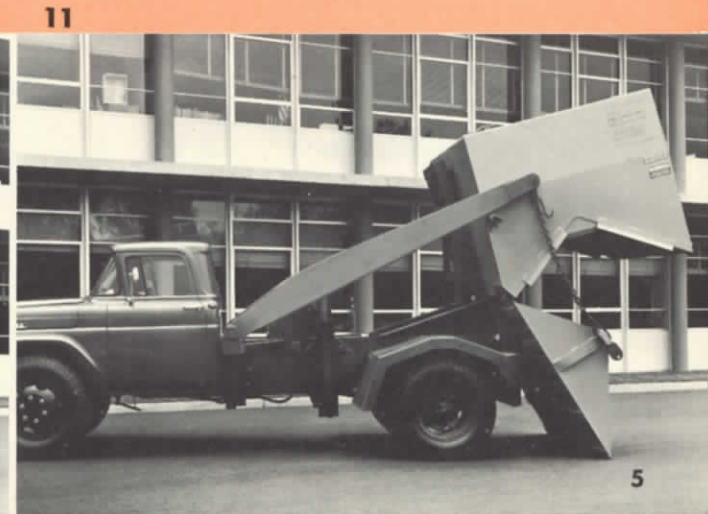
shown in Photo 9. Photo 10, at dumping point, driver actuates cylinders and pushes skid-frame and container back. When lowered down the skid-frame, the container bail engages the automatic dumping hook. This holds the container stationary at a fixed height so that when boom arms are lowered, gravity causes the hinged bottom to swing down and discharge the load as shown in photo 11. In the instance of tilt-type containers, lowering the booms causes the container to rotate backward and discharge its load. After dumping, the container is raised, disengaged from the dumping hook and moved to carrying position for the return trip.



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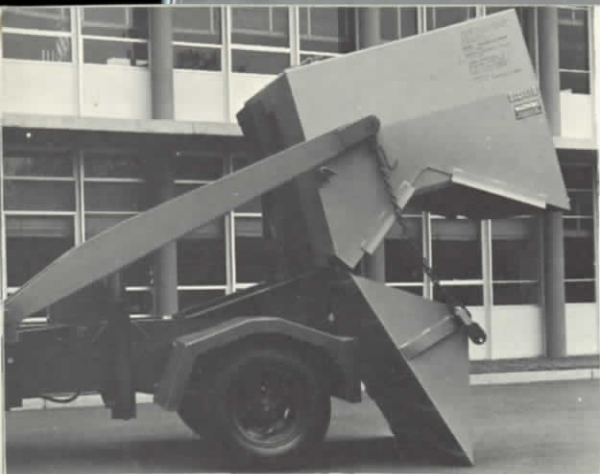


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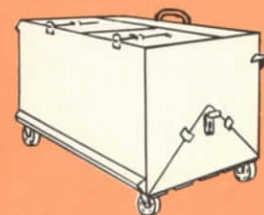
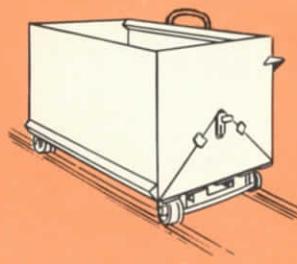
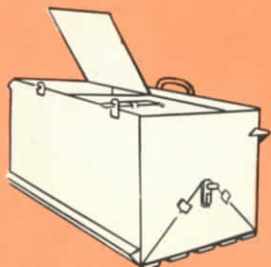
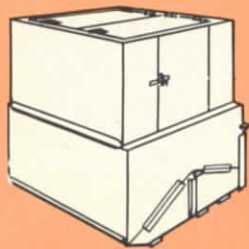
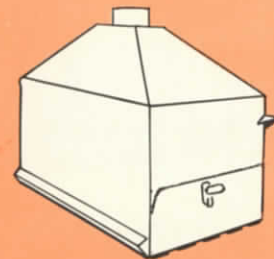
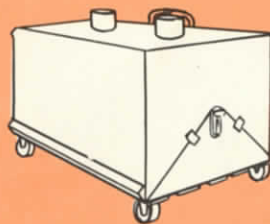
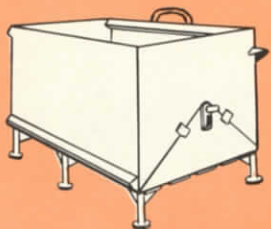
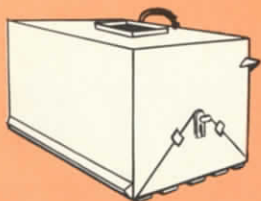
BASIC CONTAINERS

DROP BOTTOM

With the exception of tank and cargo containers, there are two basic types of Dempster-Dumpster Containers—those that bottom dump and those that tilt dump. The standard basic drop-bottom container is shown at right. It is dumped, as illustrated above, by letting the bottom section drop. The drawings below show some of the adaptations that have evolved from the basic drop-bottom design. If you have a unique material or unusual accumulation situation, it is possible one of the thousands of container designs on file will meet your requirements. If not, our engineering staff is available to create a special container for your needs.

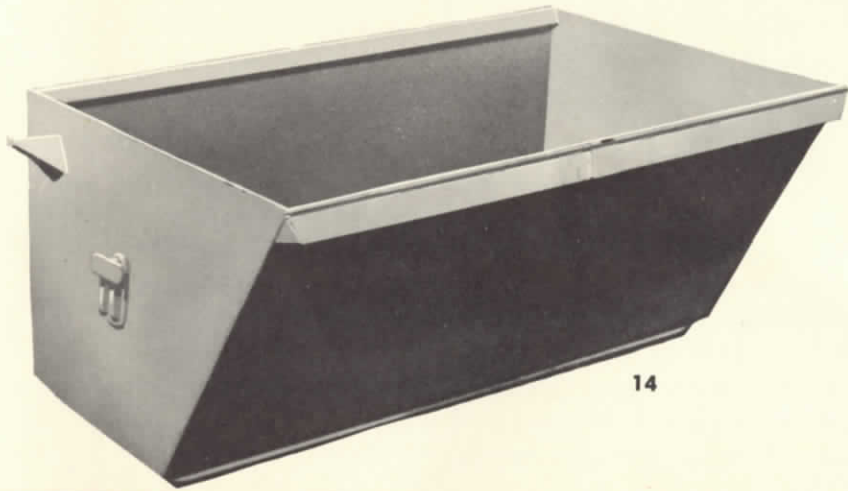


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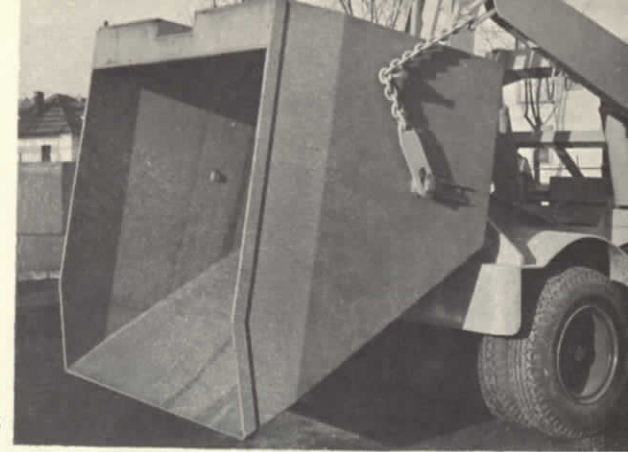
BASIC CONTAINERS

TILT TYPE

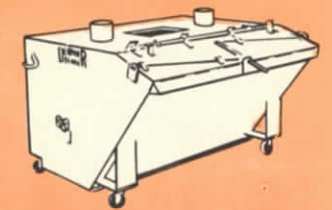
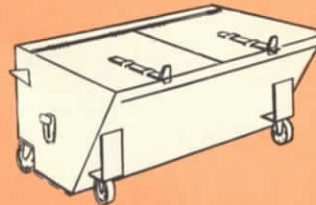
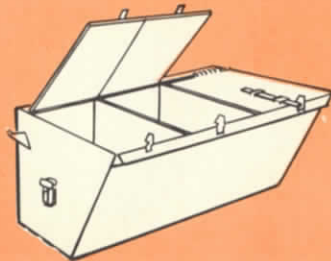
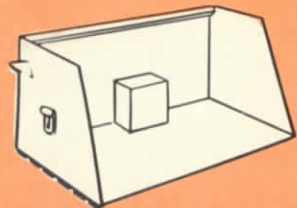
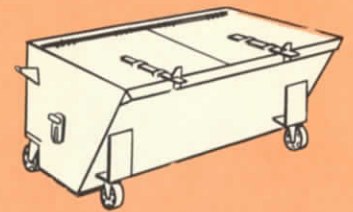
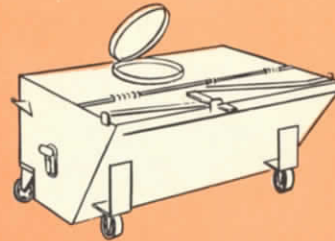
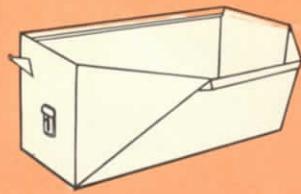
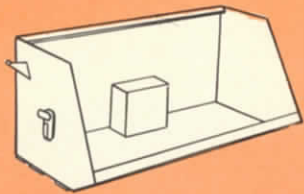


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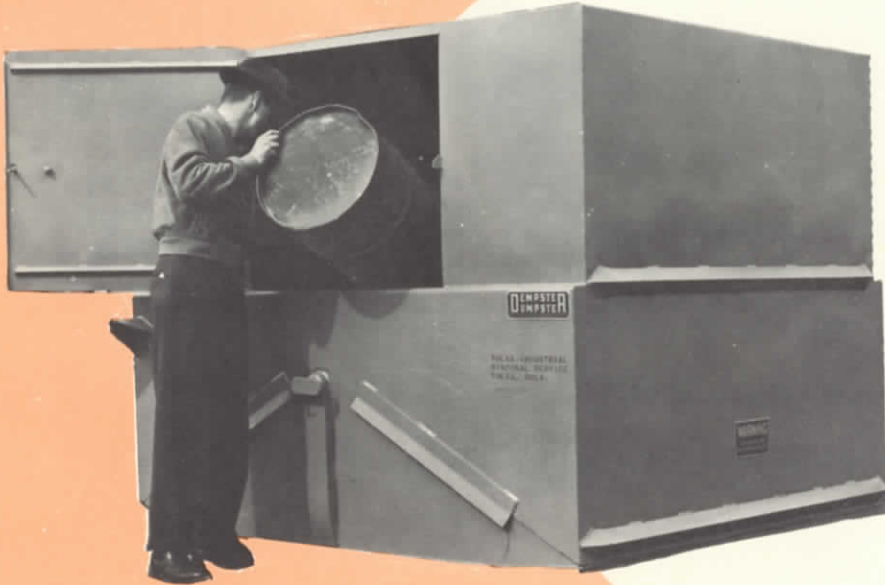


Shown at left is the standard Dempster-Dumpster Tilt-Type Container. It is dumped, as illustrated above, by rotating it backward. The drawings below show a few of the adaptations available. As in the case of the drop-bottom container, tilt-type containers come with lids, casters, manholes, risers and compartments. The popular Dempster-Dumpster Skip-Type Container is an adaptation of the tilt-type container only in its method of dumping. It is particularly adaptable to utility work, such as the handling of materials and products, because of its open design and low-loading height which permit easy manual or fork-lift loading and unloading.



DEMPSTER-DUMPSTER HANDLES

Photo 16. Ten cu. yd. low construction Universal Container.



Over 85% of all industrial waste consists of general trash and rubbish such as wrapping paper, cardboard cartons, packing excelsior, insulation, sweepings, garbage, discarded paper and other disposables. Being bulky and combustible, it is subject to blowing and scattering, and is a constant fire hazard. The answer to efficient temporary storage of general trash is big capacity to handle the bulk, complete enclosure to overcome scattering or fire hazard, and ease of loading. All of these features are found in Dempster-Dumpster Containers. Ease of loading is controlled by height of the container and placement of the doors and lids. One plant may have as many as five or six different loading situations, and this is where the versatility of the Dempster-Dumpster line yields maximum efficiency by providing the right container for any situation. On these pages are seven containers that to the untrained eye would appear to have only superficial differences; yet in terms of loading, one container in the

Photo 17. Low construction 8 cu. yd. Universal Container.

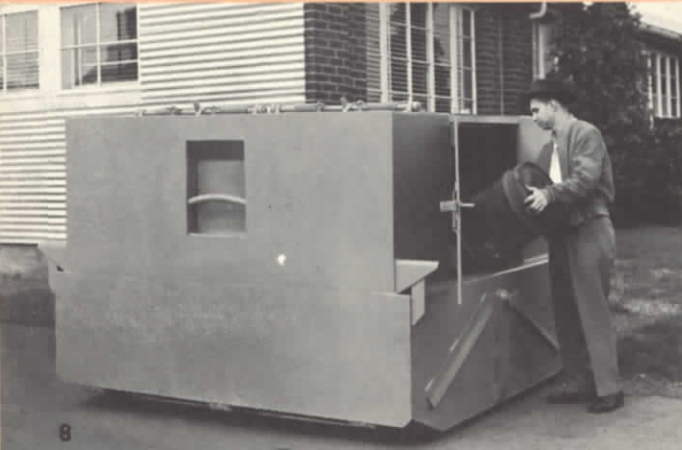


Photo 18. Ten cu. yd. Universal Container being loaded from dock.



Photo 19. Universal Container below was made especially for cart or wheelbarrow loading from dock. Container shown is 12 cu. yd. capacity, other sizes available.

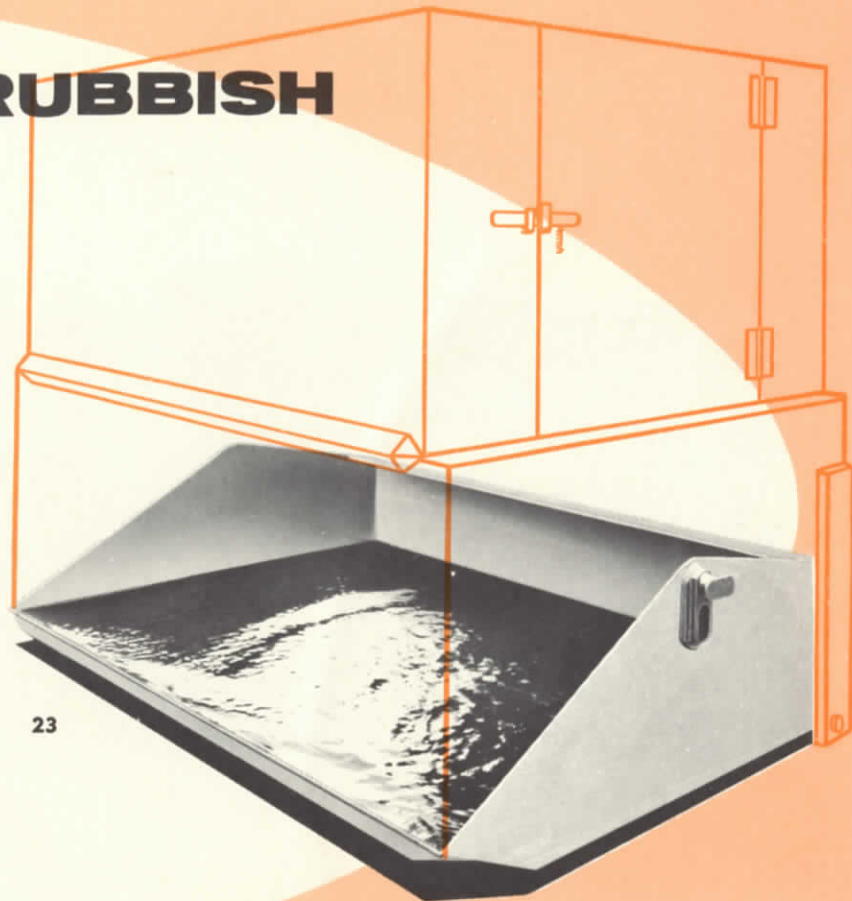


GENERAL TRASH and RUBBISH

wrong situation could constitute a serious loss of efficiency.

SUMP TYPE BOTTOM

In plants where general trash is moist or wet, a sump-bottom container is recommended. As the moisture filters down, it is contained in the sloping walls of the water-tight bottom section. The all-metal, leak-proof sump-bottom container is a Dempster-Dumpster exclusive . . . no gaskets or seals to cause trouble. The capacity of the sump-bottom varies with the size of the container. Because containers are sometimes used for other purposes after they are installed, it is wise to include several sump-bottom rubbish handling containers in every installation.



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Photo 20. Twelve cu. yd. Universal Container placed for dock or ground-level loading.

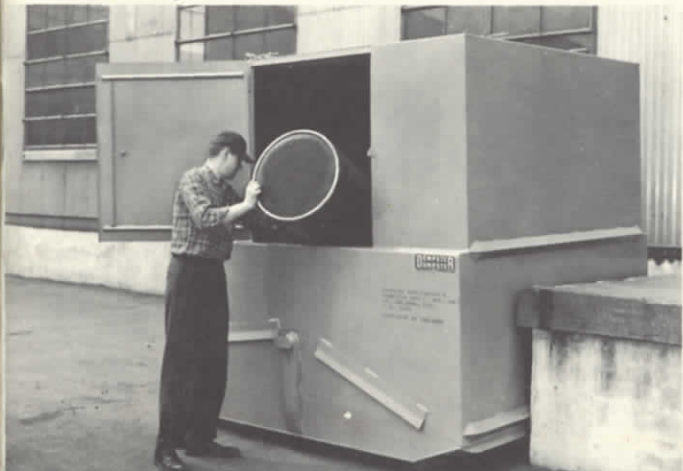
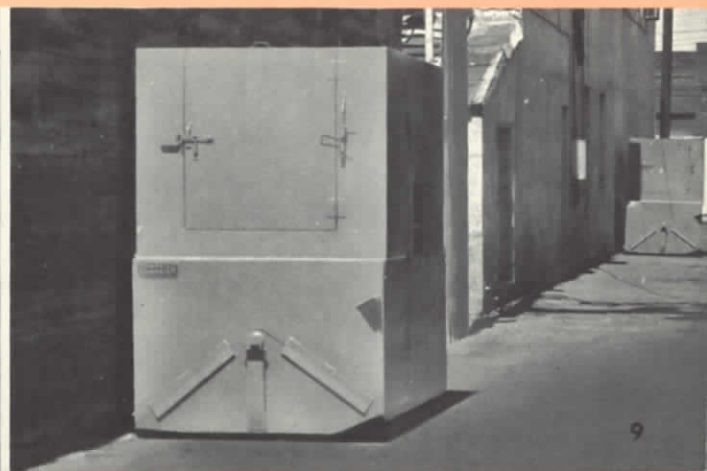


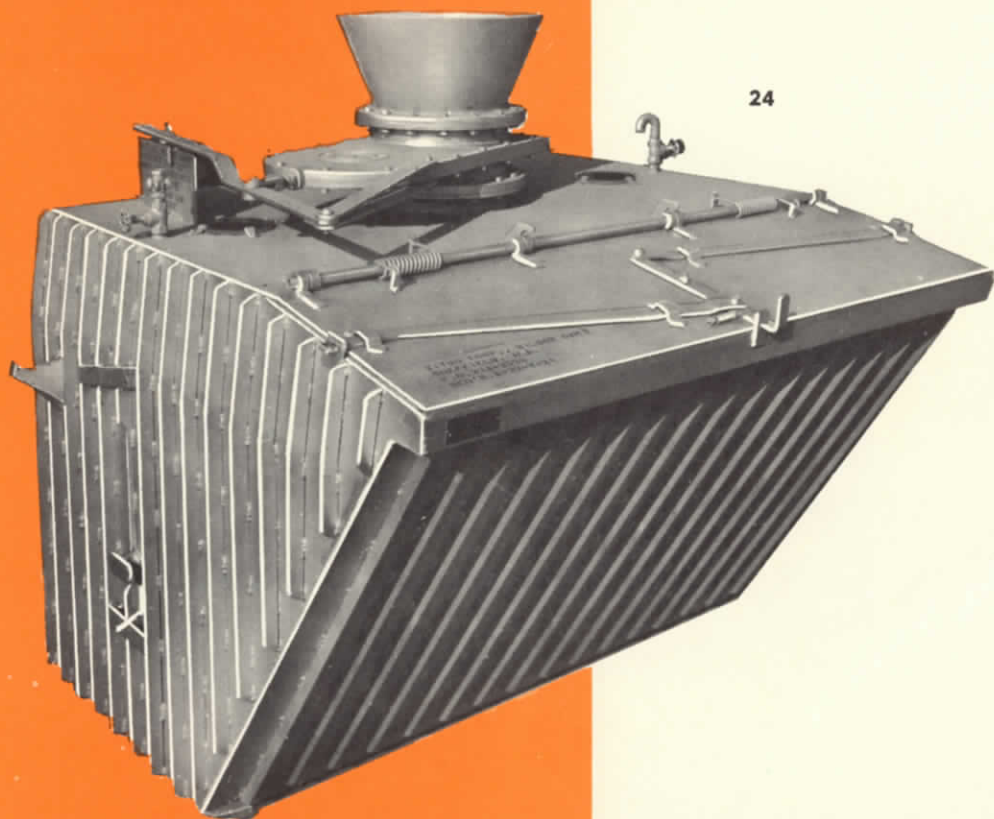
Photo 21. Ten cu. yd. Universal Container with self-balancing lids, end and side doors.



Photo 22. Nine cu. yd. Narrow Alley Universal Container.



Handling HOT MATERIALS...



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In the chemical and metallurgical field, many difficult handling problems have been met by special Dempster-Dumpster Containers equipped with insulators, false bottoms, cooling fins, asbestos gaskets, lead liners, steam coils, fire brick and other mediums. A few of the materials handled are hot skim, chlorinator ash residue, dross, ingots, hot ash, catalyst and radioactive waste. Photo 24 shows a 6 cubic-yard hot-dust container equipped with cooling fins, gate valves and glass-covered inspection openings. Photo 25 shows a 4 cubic-yard container with platform-truck legs for handling extremely hot mill scale at Allegheny-Ludlum Steel Corp. In photo 26, cut-away view shows double walls and blown rock wool insulation in a 4.7 cubic-yard container. In addition to the insulation, it has a steam coil inside the inner steel shell. Photo 27 shows a special container lined with $3\frac{1}{8}$ " of lead to handle radioactive material.

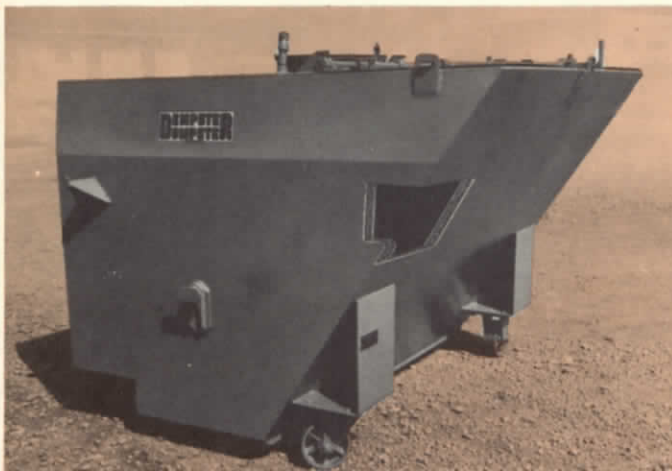
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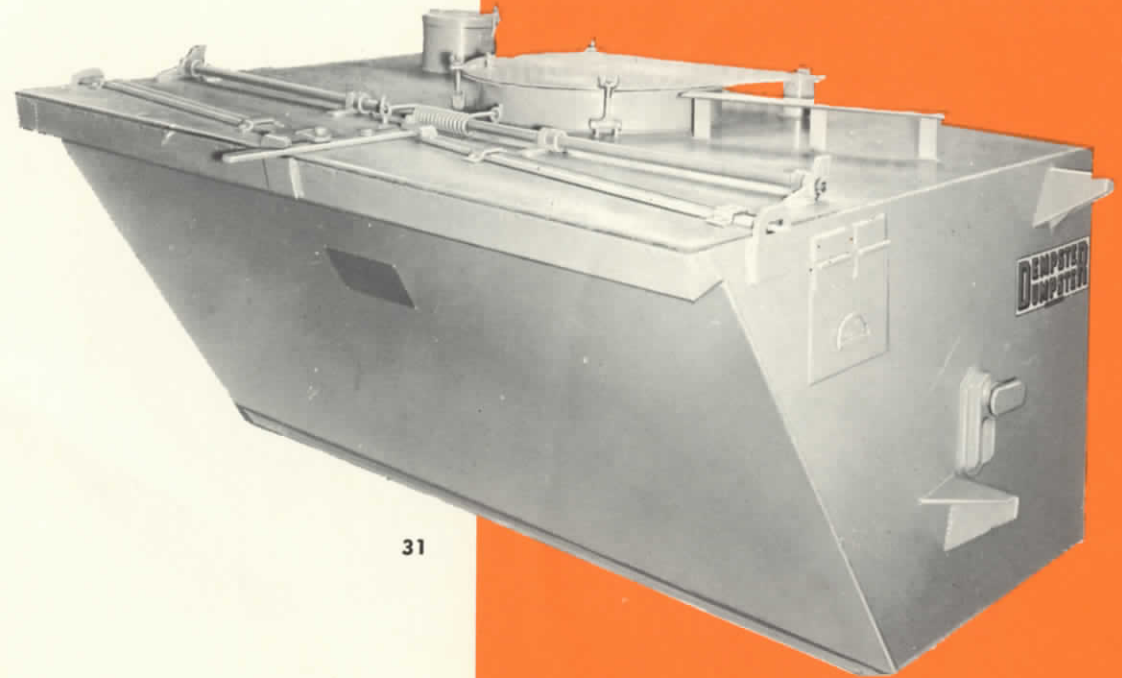


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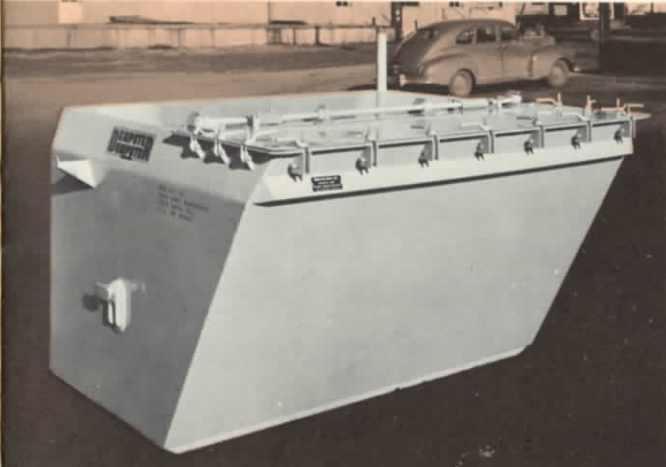


SLUDGE and SEMI-LIQUIDS

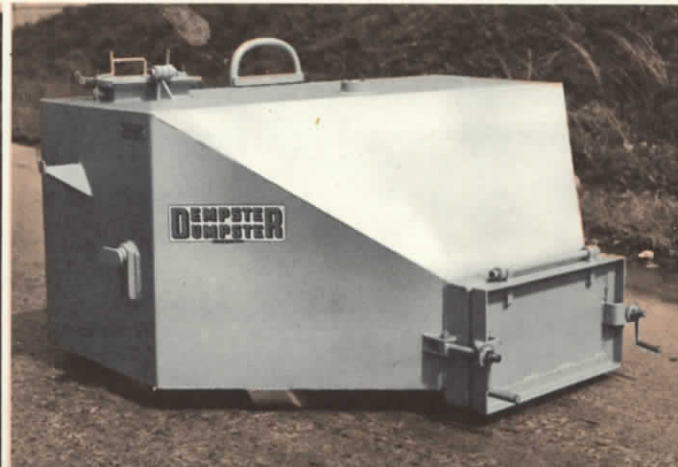
The handling of sludge, sticky tars and semi-liquids has been greatly simplified by standard and special Dempster-Dumpster Containers, which have replaced tank trailers and burn-out cans in many industrial operations. Standard tilt-type containers, with disposable liners, are used to accumulate asphalt and other sticky materials. When the container is dumped, the liner slips out with its burden, leaving the container clean. Photo 31 shows a three-yard tilt-type container, with 24" risers, now in use by E. I. Du Pont. Note the three-way locking lid. Photo 28 shows a 5 cubic-yard container with a gasketed dumping lid. Photo 29 shows a 3 cubic-yard water-tight container. Note dumping door. Photo 30 shows how the American Cyanamid Co. decants the water from waste zinc slurry, permitting the company to recover the valuable sludge that has settled. All containers of this type are of water-tight construction.



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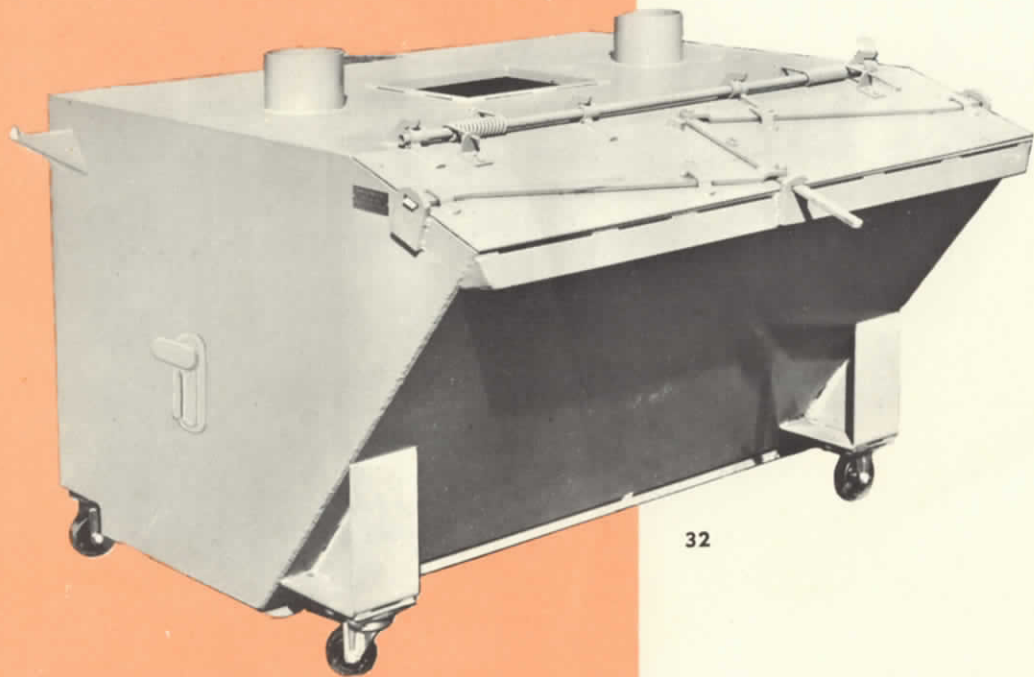
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Handling DUST...ASHES...SAND



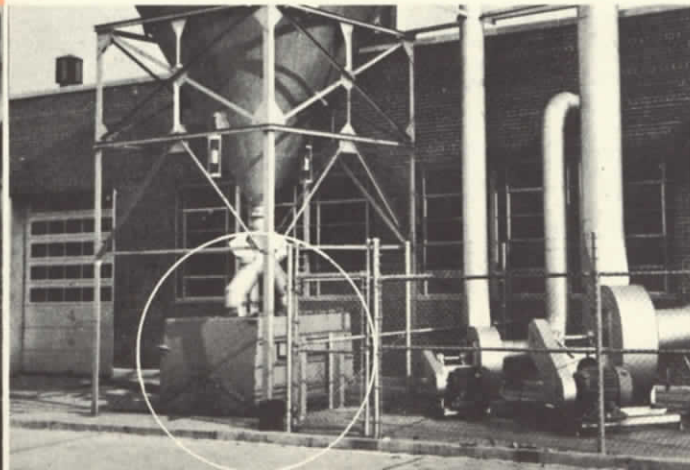
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Fly-ash, dust, sand and similar materials require tightly enclosed storage with special risers or fittings to permit transfer of the material to the container with a minimum of spilling or scattering. Use of two or three such containers, fed by a switch-pipe at a volume accumulation point, will often eliminate the need of a costly hopper storage bin. Photo at left is a special Dempster-Dumpster container for handling 5 cubic yards of waste blast sand. Note pipe risers and locking lids with gaskets. Photo 33 shows a 10 cubic yard container storing dusty material at the Rock Hill, S.C., plant of the Celanese Corp. Photo 34 shows a container storing sawdust from a dust collector. Photo 35 shows a container made dust-tight by guide-plates and gaskets. Many tested designs of special containers for handling dust, ashes or sand are available, with or without casters.

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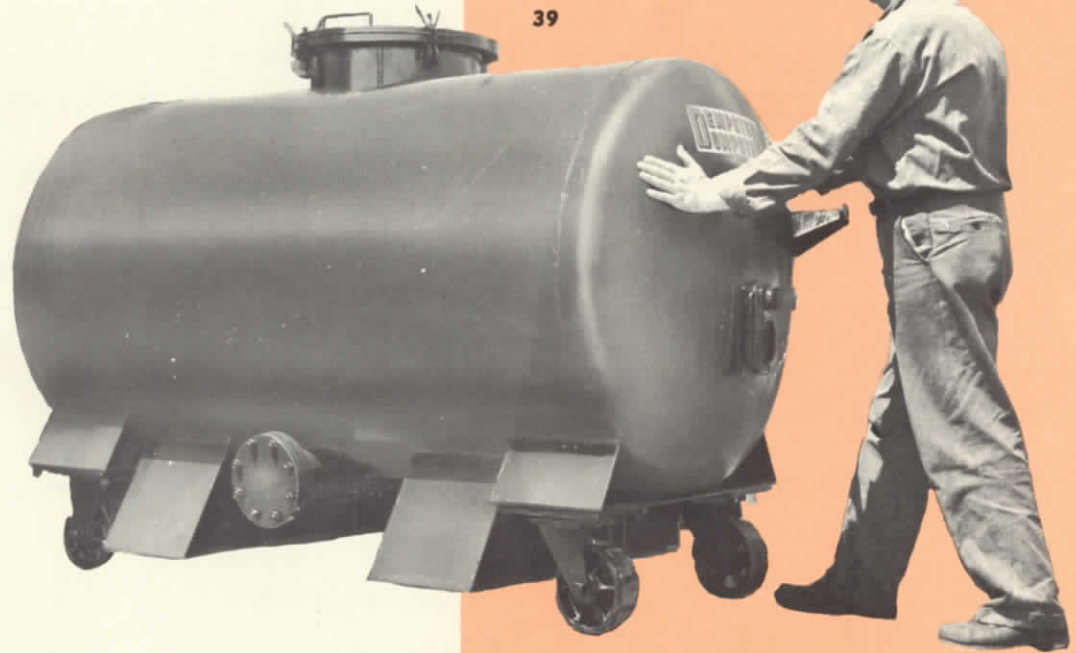


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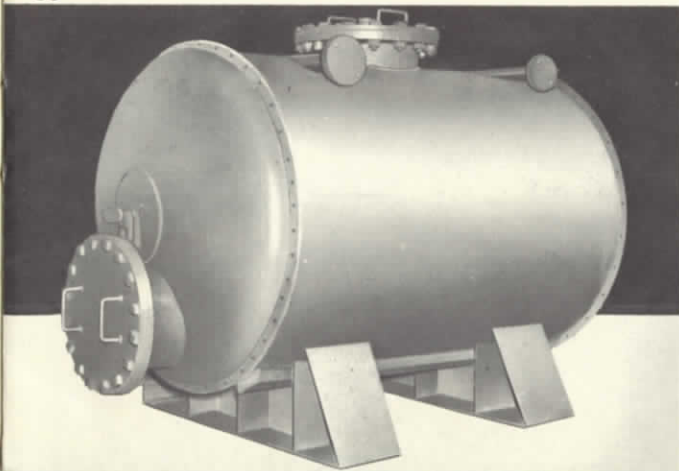
...LIQUIDS and GAS...

The handling of liquids and gases is easily performed by the many Dempster-Dumpster Tank Type Containers. Among the materials handled by leading industrial firms are acids, organic chemicals, lubricating oils and other petroleum products. Containers are available lined with rubber, lead, or highly resistant coatings such as polyvinyl chloride plastic and synthetic resins. They are built of steel, aluminum, stain clad and stainless steel. Models are available with steam jackets, risers, manholes, gauges, valves, hoses, nozzles, gaskets and casters in pressure or non-pressure types. Photo 39 shows pressure-type tank container equipped with 8" casters. Photo 36 shows a tank made of stainless steel. In photo 37 a Tilt Type container has been equipped with a solid, water-tight cover and two pipe risers. Photo 38 shows two aluminum pressure-type portable tanks with steel frames and casters.

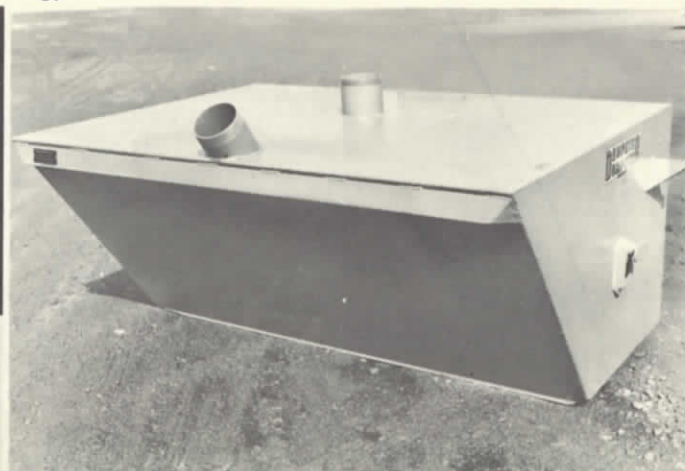


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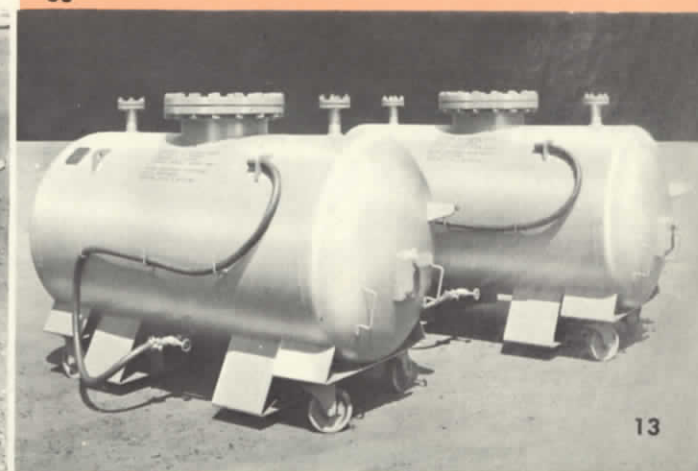
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THE GRD 304-F-2

The Dempster-Dumpster GRD consists of a three-stage telescopic mast with two fork lifting arms. It was designed to provide high dumping of containers into large trailers, volume packer trucks, packer trailers and railroad gondolas to meet the long-haul problems facing many industrial plants. However, where there is no long-haul problem, the GRD can be used to carry containers to the disposal area for dumping in the manner of a conventional Dempster-Dumpster. The GRD features one-man operation, automatic pickup of containers without the driver leaving his cab, shorter turning and high dumping. Its low (9½ ft.) clearance permits it to go under storage hoppers and even inside buildings to pick up containers. The GRD dumps up to 7½ cubic-yard capacity tilt-type containers or drop-bottom containers up to 15 cubic-yard capacity at any height from ground level to approximately 10 ft.

Photo 40. GRD with fork arms in carrying position.

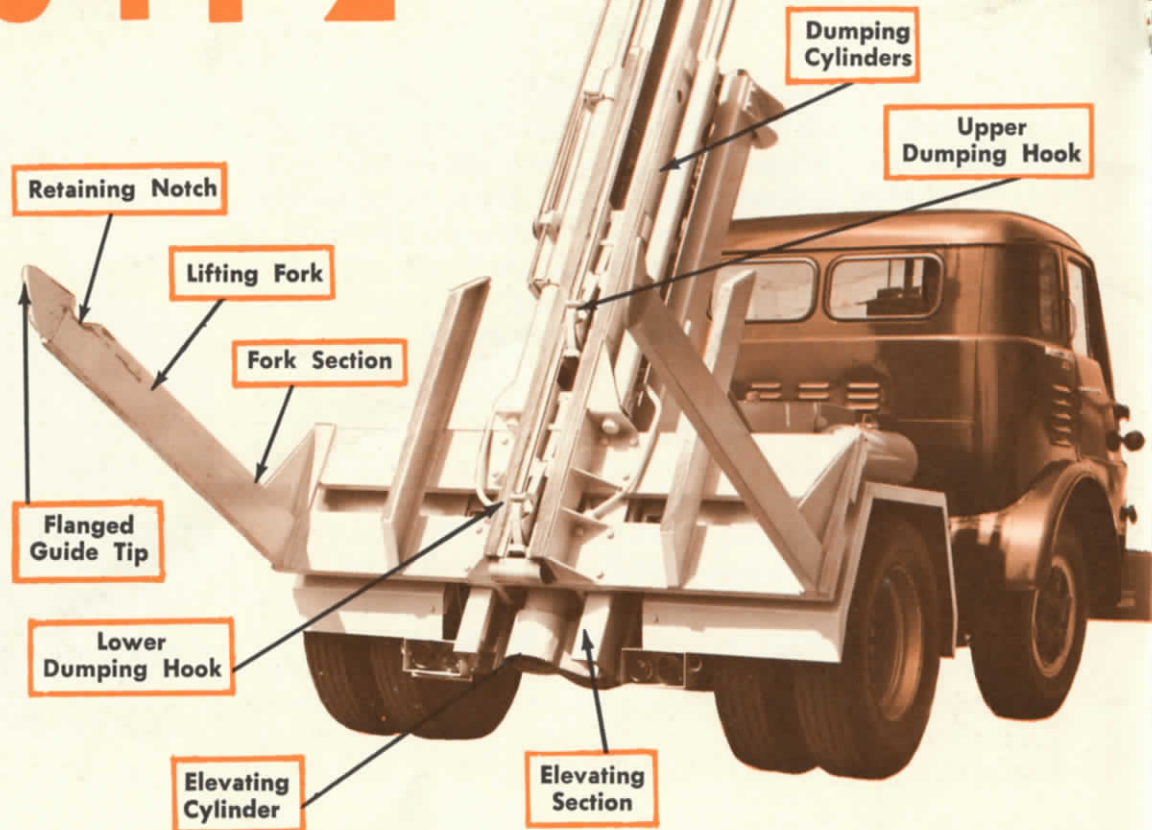
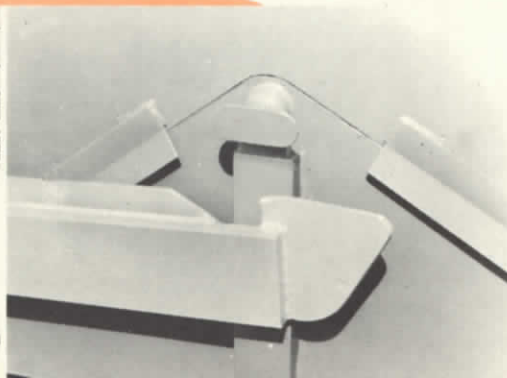
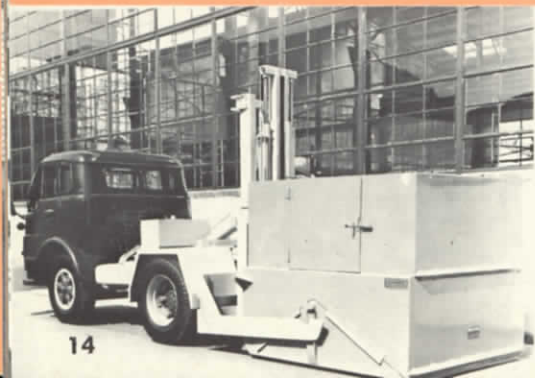


Photo 41. GRD backs up to loaded container.

Photo 42. Forks slip under container lifting links.

Photo 43. Container is lifted up the skid frame.

Photo 44. With container in carrying position, GRD moves toward trailer or disposal area.





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Photo 49 and 50 offer a comparison between the dumping action of a drop-bottom container and a tilt-type container as they are shown dumping into a railroad gondola car. Note that the drop-bottom container (above) remains upright, while the tilt-type container, (below) has rotated backward on the axis of its lifting pins to discharge its load.

In photo 46, below, DEMPSTER-DUMPSTER GRD empties an 8 cu. yd. Universal Container into a 30-yard DINOSAUR Container.

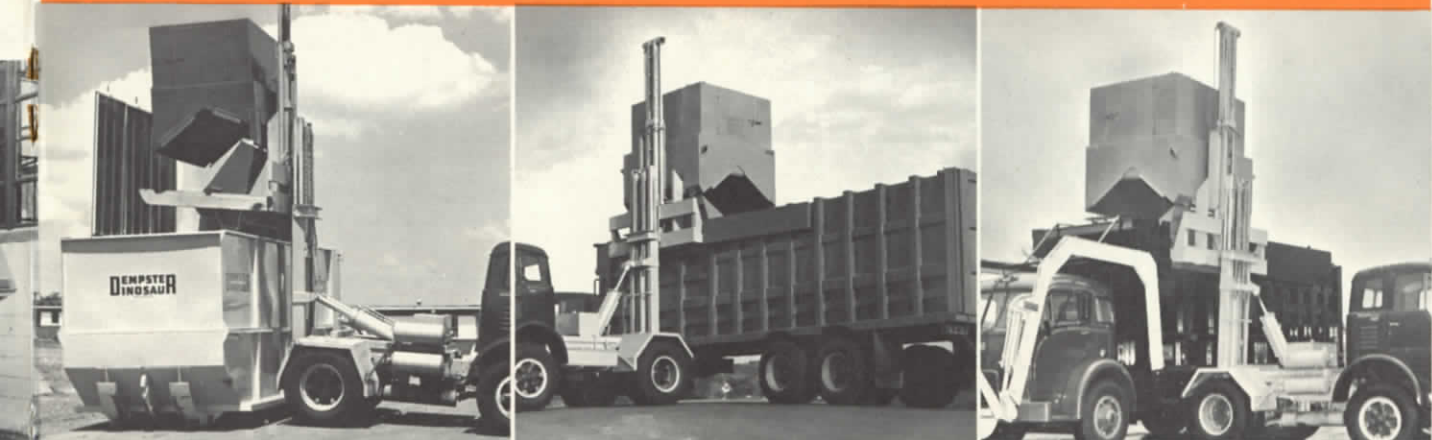
The versatile GRD can be used with any trailer, including the DEMPSTER Compaction Trailer, shown in photo 47, below.

Photo 48, below, further illustrates the flexibility of the GRD, as it empties a container into a Dumpmaster hopper.



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Truck approaches Dumpmaster container and forks engage lifting channels on the side.



Container is raised off ground as lifting arms rotate backward.



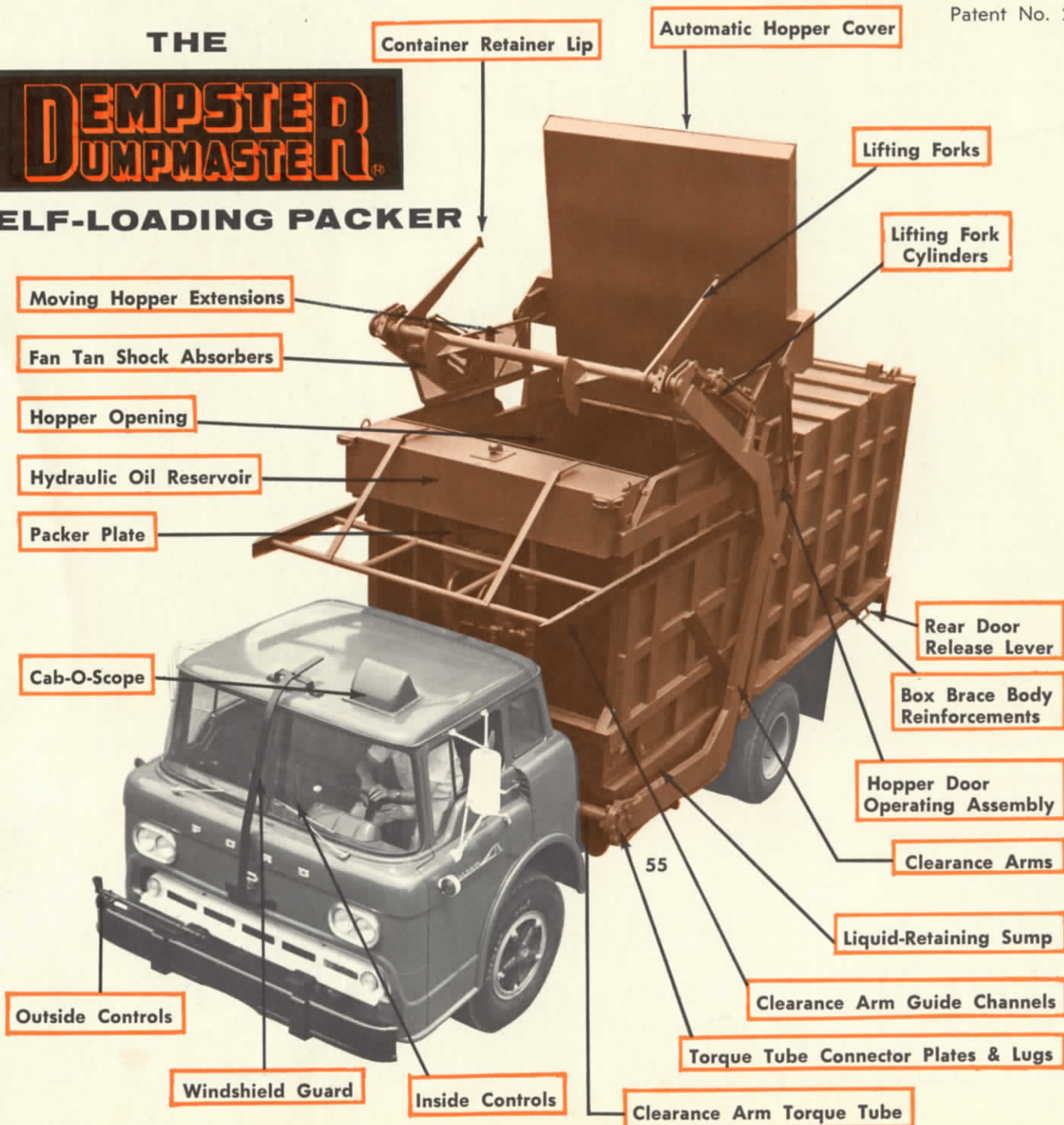
Container begins to tilt backward as it approaches the hopper opening.



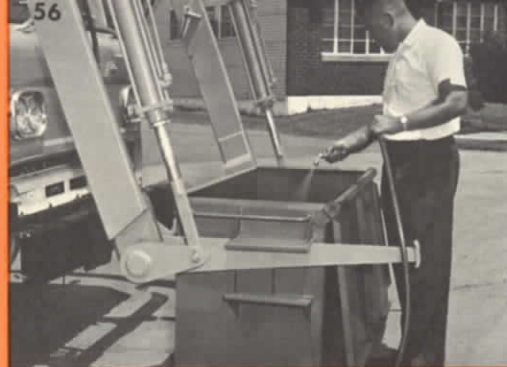
Container inside hopper opening. Top lids swing open and refuse is emptied into compaction body.

THE
DUMPMASTER
SELF-LOADING PACKER

Covered by U. S. Letters
 Patent No. 2,900,096



The DEMPSTER-DUMPMASTER System consists of a number of detachable storage containers placed at points of waste or refuse accumulation. As containers are filled, the truck-mounted Dumpmaster makes its round, automatically picking up each container and emptying the contents into its packer body. Here, the material is compressed to a fraction of its former volume by action of a hydraulically-powered packer plate, enabling the Dumpmaster to haul the equivalent of many truck-loads of material on one trip to the disposal area. This, combined with its rat-proof, fly-proof, out-of-sight, enclosed storage feature make the DEMPSTER-DUMPMASTER the world's most efficient and lowest cost system of refuse storage and collection. One man, the driver, handles the entire operation without leaving the cab, hydraulically picking up containers below grade, at ground level and from high docks. The safe clearance lifting arms bridge the cab at all times, precluding the possibility of injury to the driver's arms or head. A three cu. yd. hand loading container converts the Dumpmaster for use as a conventional packer unit.



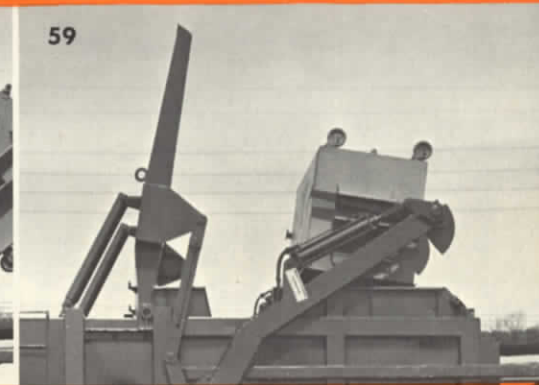
An air-pressure tank holding water or liquid deodorant compound for spraying out containers is available as an optional extra.



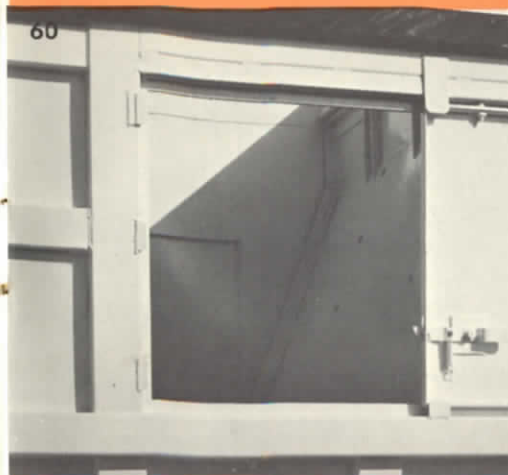
Outside controls are provided for use when driver must dismount to go inside or to inaccessible spots to move container to lifting forks.



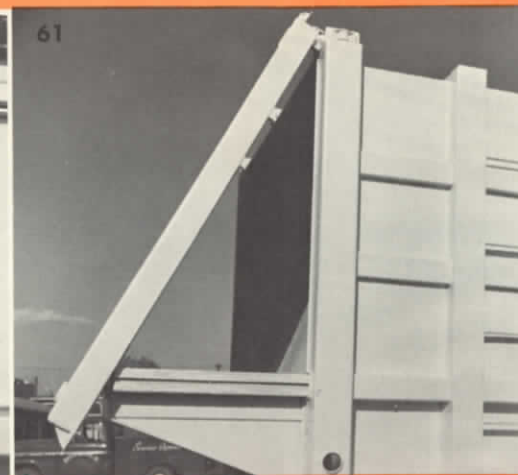
An optional automatic hopper cover increases body capacity by permitting use of the hopper area.



Here, hopper cover is completely opened as container reaches dumping position.



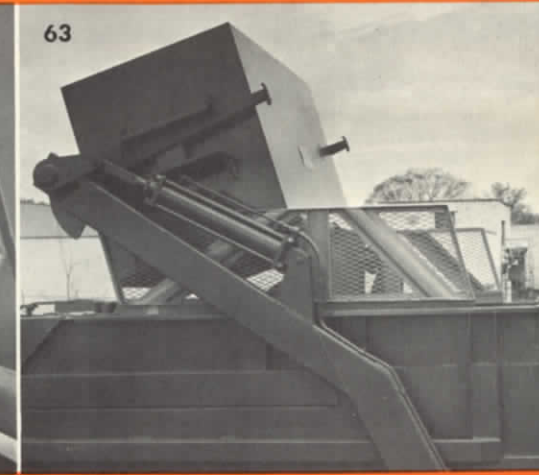
For manual loading, and to provide access to the hopper area, a sliding door in the side of the body is provided.



Rear door is heavily reinforced and has neoprene gasket. Note how packer plate guide shoes hold door open to assure escape of all material.



Movable hopper extensions are for use in windy areas. They are secured to clearance arms, as shown above.



Hopper extensions automatically move into operating position during dumping.

DEMPSTER DUMPSTER® SYSTEMS

The smallest DEMPSTER-DUMPMASTER is the model CA15-18DB which is generally fitted with 1500 lb. capacity clearance arms. This model handles one-half through three cu. yd. containers and, depending on the density of material to be handled, holds the equivalent of 72 cu. yds. of loose refuse when fully packed.

65



The CA30-24DB Dumpmaster

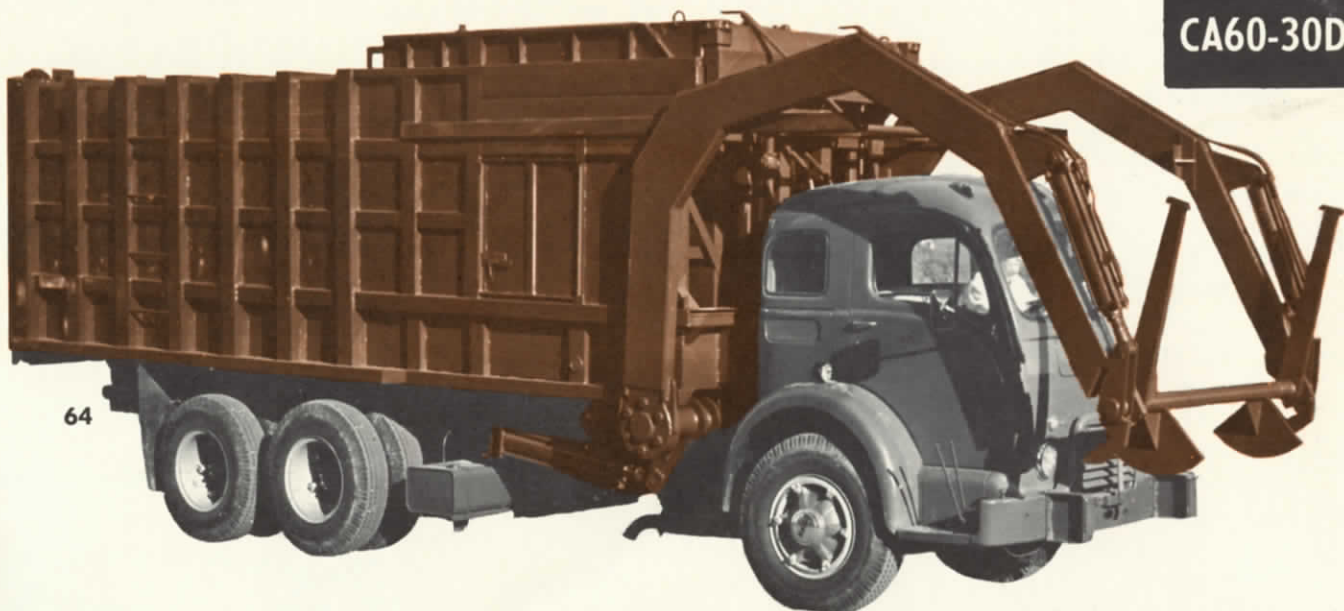
66



The CA15-18DB Dumpmaster

THREE MODELS AVAILABLE

CA60-30DB



64

The middle Dumpmaster, model CA30-24DB, has a 24 cu. yd. compaction body. In most cases, it is fitted with 3000 lb. capacity clearance arms, and can handle one-half through eight cu. yd. containers. Depending on the density of material, it holds the equivalent of approximately 100 cu. yds. of loose refuse when fully packed.

The CA60-30DB is the largest Dumpmaster, with a 30 cu. yd. compaction body. It is usually mounted with 6000 lb. capacity clearance arms and handles one-half through eight cu. yd. containers. Depending on the density of material, it holds the equivalent of approximately 120 cu. yds. of loose refuse when fully packed.

67



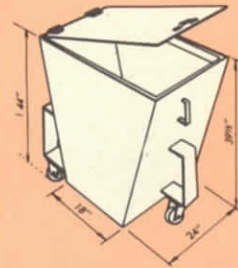
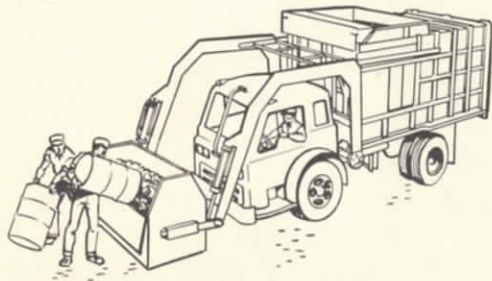
COMPACTION

All three Dumpmaster models deliver a 60,000 lb. compaction force to their packer plates. The 18DB has a four-stage telescopic cylinder; the 24DB a five-stage, and the 30DB a six-stage. Note the telescopic cylinder and packer plate in photo 68 at right. Sharks teeth in ceiling help retain material during compaction. Top of packer plate is hinged and spring-loaded to prevent material from being trapped in ceiling. Photo 67 at left shows a typical load being discharged. Note density of compaction.

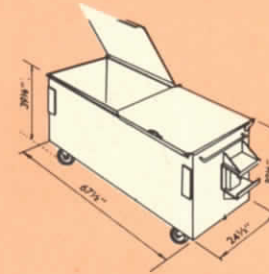
CONTAINERS

Note: All dimensions are approximate and subject to change without notice. Before ordering consult representative or factory.

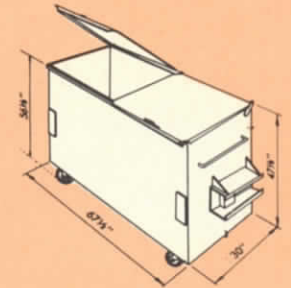
Dumpmaster Containers are built to give many years of trouble-free efficient service. Fabricated to precision tolerances from heavy-gauge steel, they are electric-welded, reinforced at points of stress and wear, shot-blasted, given two rust-resistant primer coats and a tough finish coat in your choice of colors. For indoor use, containers are available with casters and couplers. They can be towed by plant-mules or fork trucks around aisles and in tight places. Containers of all sizes are available for indoor and outdoor use. When not handling big-capacity containers, the DEMPSTER-DUMPMASTER can be used on hand-loaded routes with the three cu. yd. hand-loading container shown in sketch below.



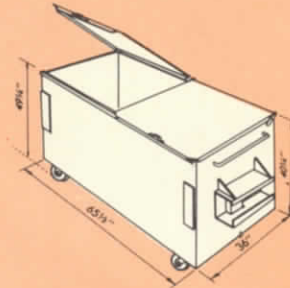
One-Half Cubic Yard



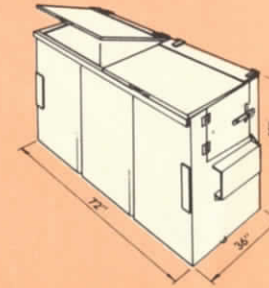
1 Cubic Yard



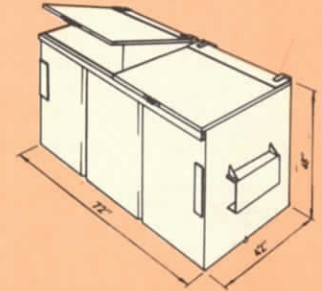
2 Cubic Yard



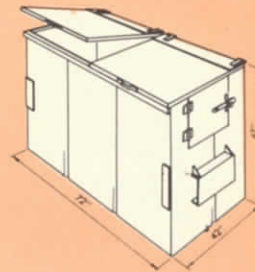
2 Cubic Yard (Low)



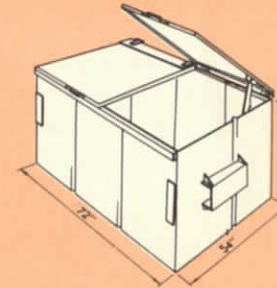
3 Cubic Yard Universal



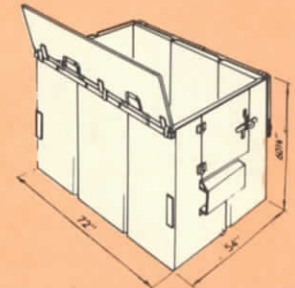
3 Cubic Yard (Low)



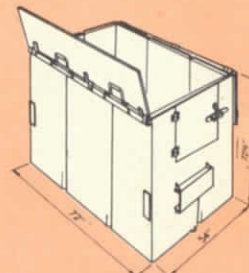
4 Cubic Yard Universal



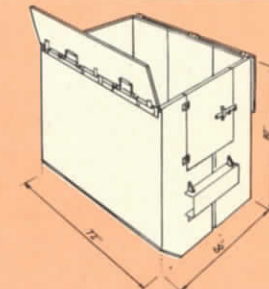
4 Cubic Yard (Low)



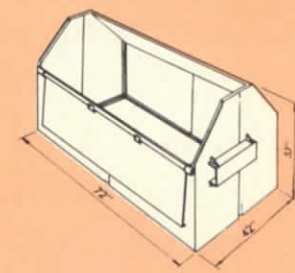
5 Cubic Yard Universal



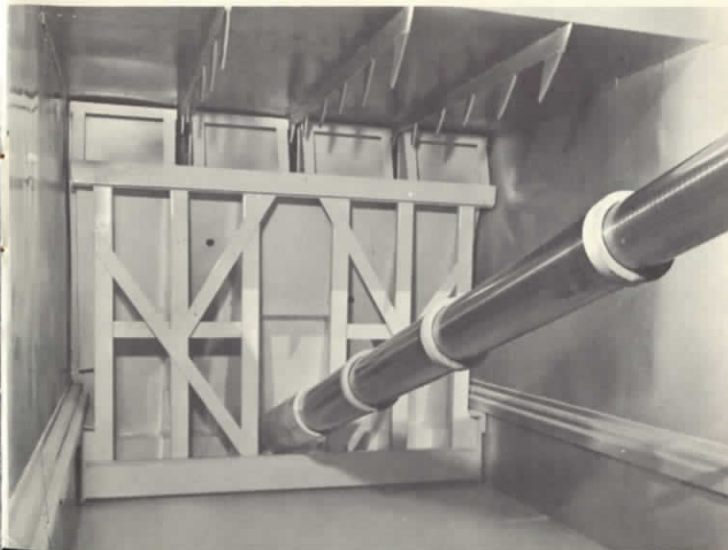
6 Cubic Yard Universal



8 Cubic Yard (Model 50)
Universal

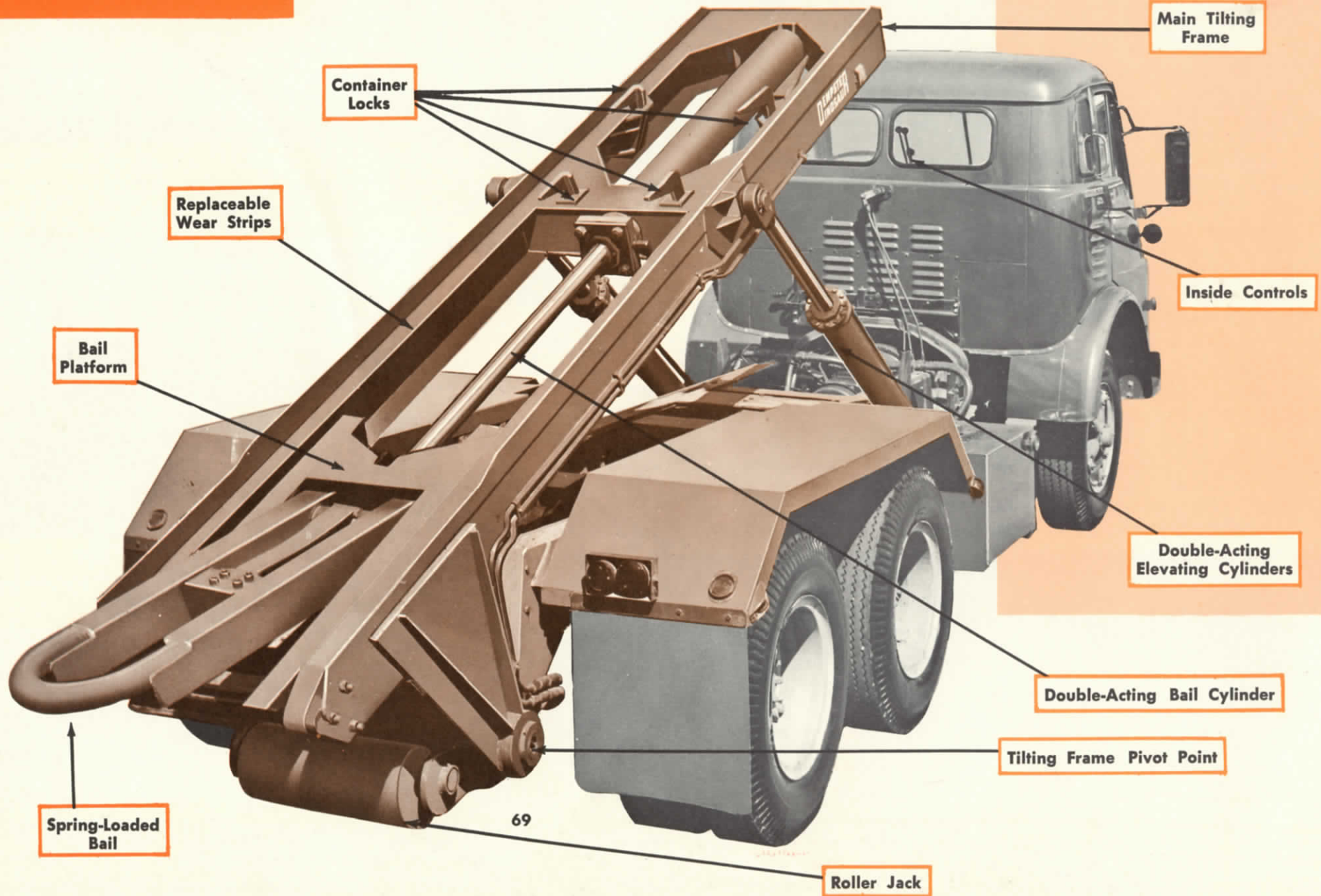


3 Yard Manual Loaded



DEMPSTER DINOSAUR®

FOR BIG PAY LOADS AND GIANT



DETACHABLE CONTAINERS

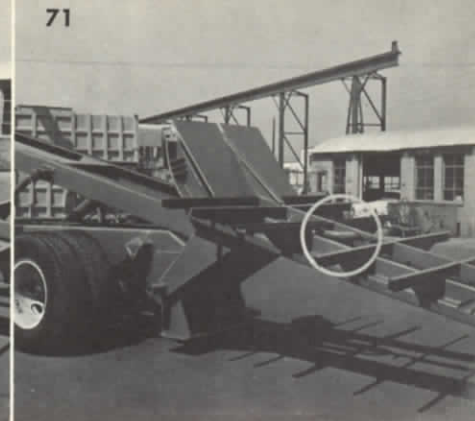
The DEMPSTER-DINOSAUR is a new system of materials handling that employs small or large detachable containers ranging up to 40 cu. yd. capacity, with larger containers available for special situations. Only one man, the driver, operates the system which, in most situations, will do the work of several trucks. All operations are hydraulic and handled from simple controls in the cab. Over-the-road gross loads up to 30,000 lbs. may be handled. In off-the-road applications, weight and container size is limited only by the size of the truck. Uses of the DEMPSTER-DINOSAUR in the refuse collection, materials handling and scrap collections industries are almost endless.

HOW IT WORKS

The DINOSAUR is of extremely simple design, consisting of a tipping frame, two hydraulic raise-lower cylinders and a "U" shaped bail which is moved back and forth by a double-acting cylinder. Containers are mounted on a base which has a guide rail with recessed lifting hooks spaced from front to back at intervals to coincide with the length of the bail cylinder stroke. As illustrated in photos 70 through 73, the bail enters and engages the first lifting hook. The cylinder pulls the container up on the tipping frame, then moves back to engage the bail in the second hook. This forward and backward ratcheting action is repeated and the frame is lowered until the container base is pulled into carrying position and locked. Progress of the bail is shown by white circles. To put container off on ground, dock or legs, the action is reversed with the bail pushing against the back of the lifting hooks. Photos below show pickup of an actual container.



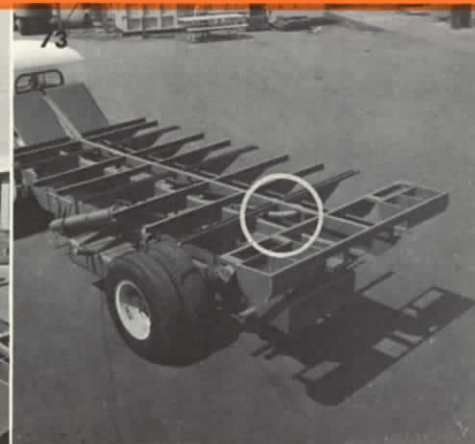
Bail engages first hook station and container base is pulled up on tipping frame.



Frame is lowered and bail moves back to engage second hook station.



Bail cylinder pulls base up on tipping frame which is then lowered.



Bail engages last hook station and pulls base forward into carrying position.

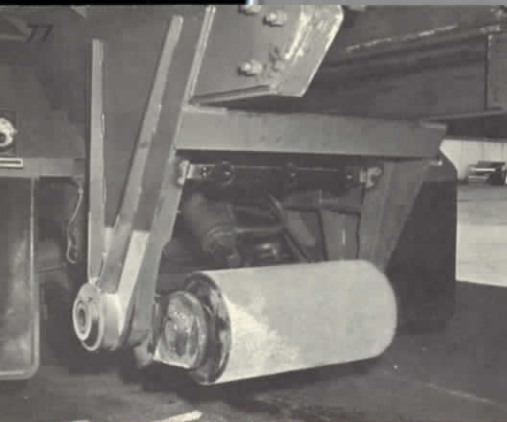


74

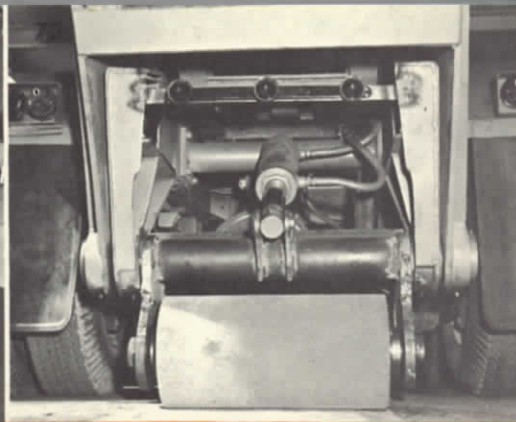
75

76

21



Hydraulically operated roller jack at rear shown in "up" position.



When down, jack provides constant moving support during pick up or lowering.



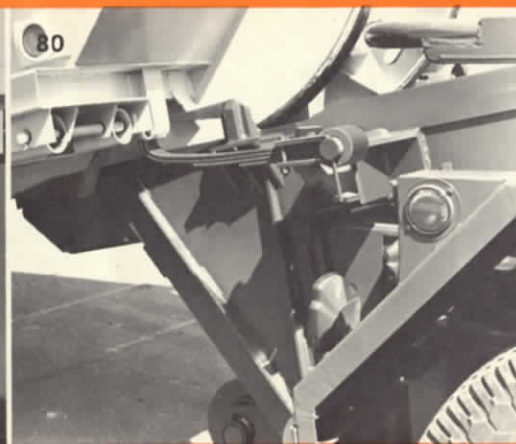
Low construction container is ideal for use with scrap metal storage.



Thirty cu. yd. container being loaded with refuse by GRD 304-F2.



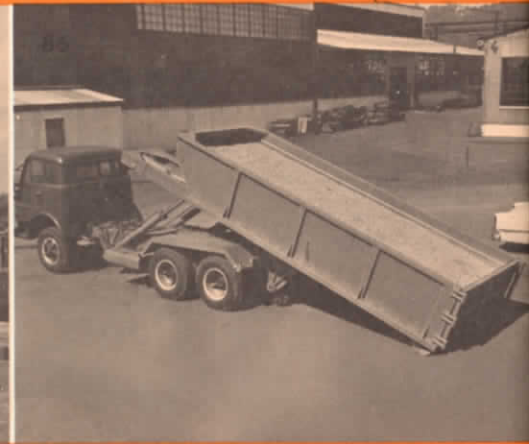
Retaining springs prevent container from slipping under icy, slick conditions.



Engaged in lugs under container spring holds container while bail operates.



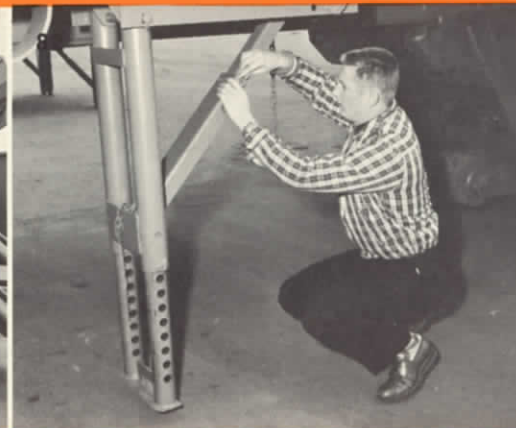
Gigantic load of brick is picked up in seconds. Ideal for wrecking work.



Load of gravel in excess of 30,000 lbs. picked up. Note load has not shifted.



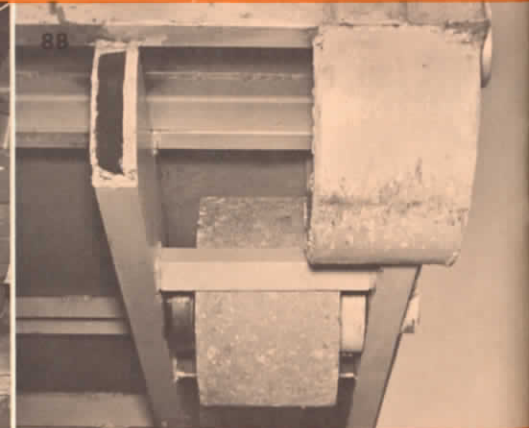
To leave containers at dock height adjustable-height legs are used.



Legs swing down and are set by placement of two simple pins.



All hydraulic operations are controlled from simple controls in cab.



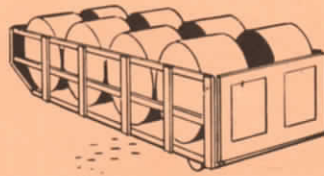
Rollers at rear of container permit it to be backed into inaccessible places.

CONTAINERS

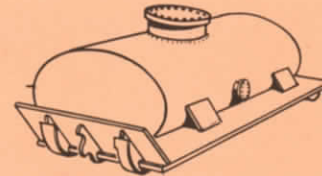
Using the basic rack or understructure, containers may be constructed to meet any materials handling need. Many standard containers with various combinations of lids, doors and tail gates are available in sizes ranging from 8½ to 22 ft. in length, and six to 41 cu. yd. capacity. Larger containers are available on special order. Flat skids, tanks, hoppers, conventional dump bodies, portable tool sheds, field offices, heavy equipment carriers and cable reel mounts may all be used with the same truck-mounted DEMPSTER-DINO-SAUR.

For handling large volumes of refuse, a compactor container with its own power plant and hydraulic system is available.

Existing equipment such as usable dump bodies, portable generators, boxes, etc. may be converted for use with the Dinosaur by purchasing a basic understructure.



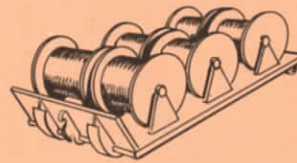
Stake Type



Tank Type



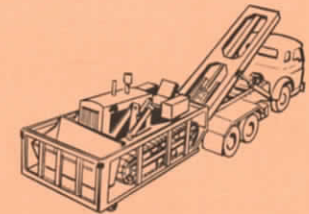
Dump Bodies



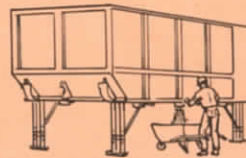
Cable Reel Mounts



Portable Field Offices



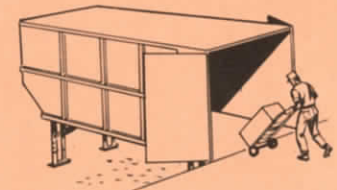
Heavy Equipment Carriers



Portable Hoppers



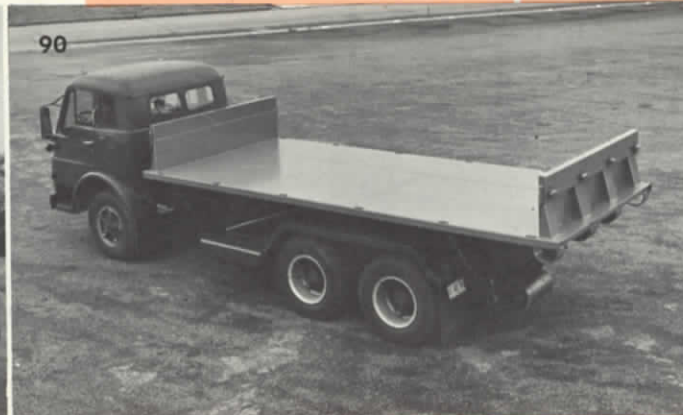
Refuse Compactors



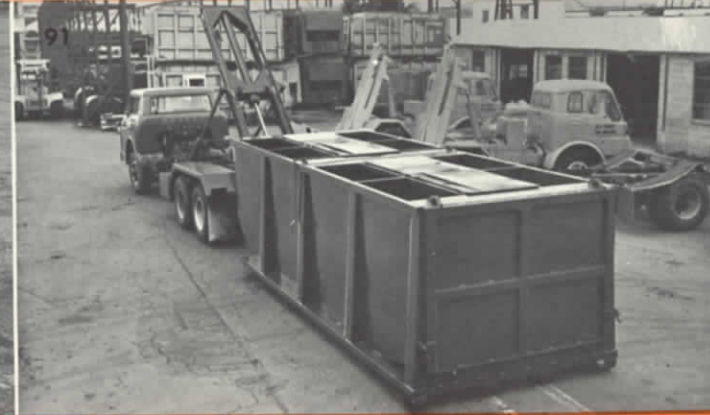
Cargo Type



Two smaller containers handled at one time by Dinosaur.

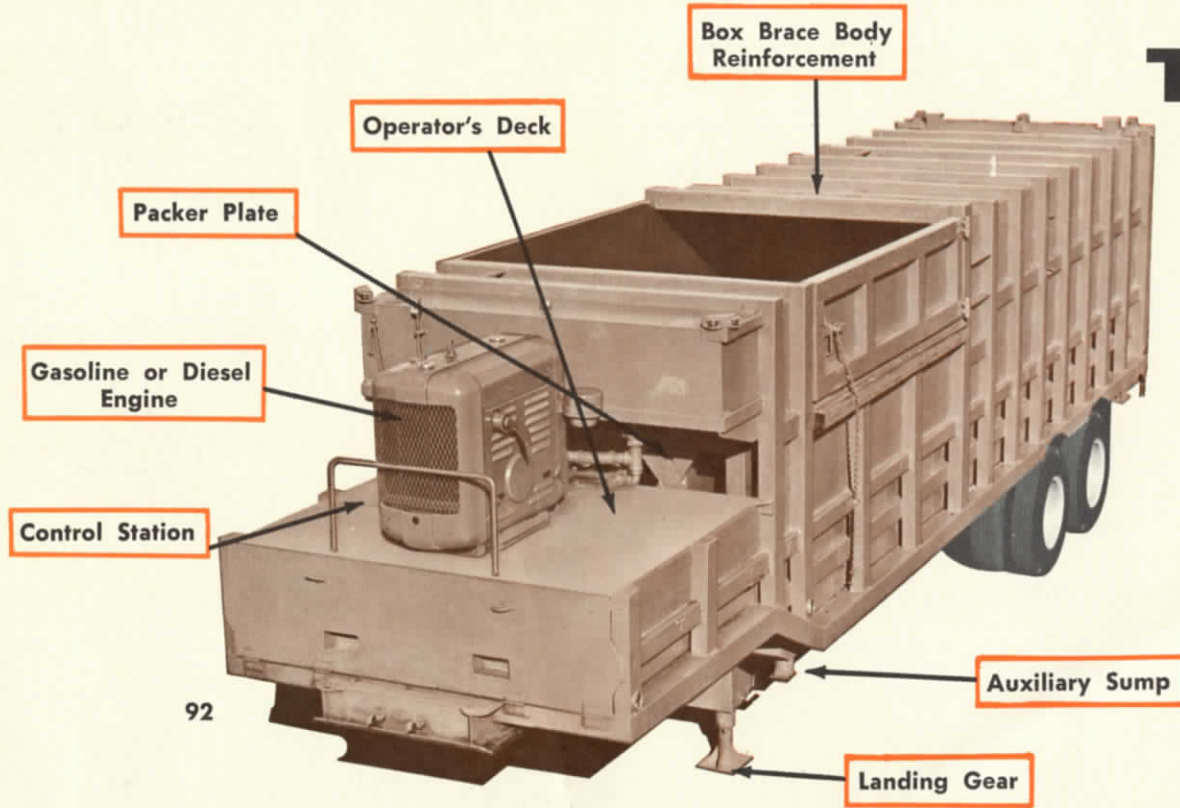


Stake side body converts Dinosaur for conventional truck use.



Container with compartments segregates different materials during storage.

The DEMPSTER

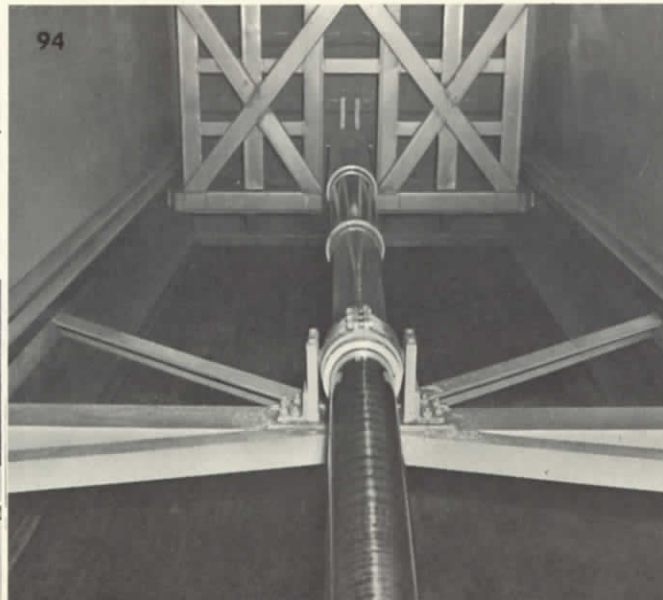


The DEMPSTER COMPACTION TRAILER is the world's largest hydraulic packer. It was designed for use by municipalities, private haulers and on armed service bases where long hauls to disposal areas are becoming increasingly expensive. It also offers work-saving advantages to industrial plants where large accumulations of bulky wastes, trash and refuse exist. The DEMPSTER COMPACTION TRAILER greatly decreases the number of trips to disposal areas, because its powerful hydraulic packer plate packs refuse to about a fourth of its former volume. It is available in two sizes: Model DB-42 will hold up to approximately 160 cu. yds. of refuse; the DB-53 will hold up to approximately 210 cu. yds. It has its own power-plant, landing gear, and can be handled on any standard fifth wheel tractor.

Shown below is the Model DB-53, which is 12 ft. 6 in. high and has a storage area of 53 cu. yds. of compacted material.

Photo below shows packer plate telescopic cylinder and outrigger platform which supports the cylinder during its 65,000 lb. thrust.

A typical load of refuse is being discharged below. Note how tightly the material is compacted.



COMPACTION TRAILER

Models DB-42 and DB-53 are identical except for over-all height. The DB-42 is 34 ft., 7 in. in length, 10 ft., 8 in. in height and 8 ft. wide. The DB-53 is 12 ft., 6 in. high. Both are available with tandem or single axle. Heavy-duty air brakes are furnished, mounted directly on the axle. All axles have 18,000 lb. capacity. Hopper opening is 100 inches in length by 85 inches in width with side doors to lower loading height. An 18-gallon sump at front of trailer gathers liquids when wet refuse is compacted. The packing mechanism moves the complete length of the packer body with a 65,000-pound thrust. It is operated by a hydraulic pump with a 50-gallon capacity at 1,800 RPM, which is completely controlled by one double-acting lever. Three rows of retaining teeth in ceiling of packer body prevent waste material from springing back during compression. A 50 HP power plant is mounted on an operation deck at the front of trailer.

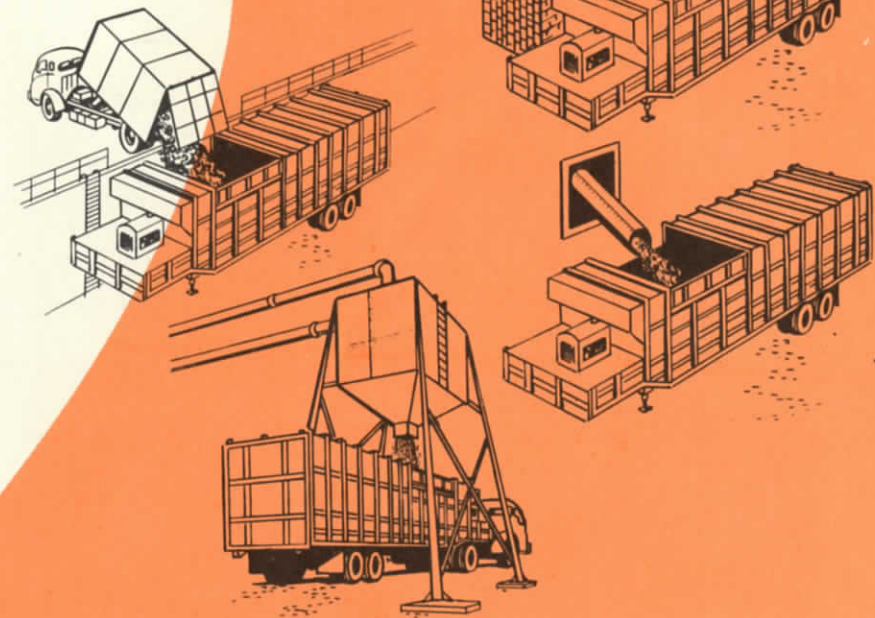
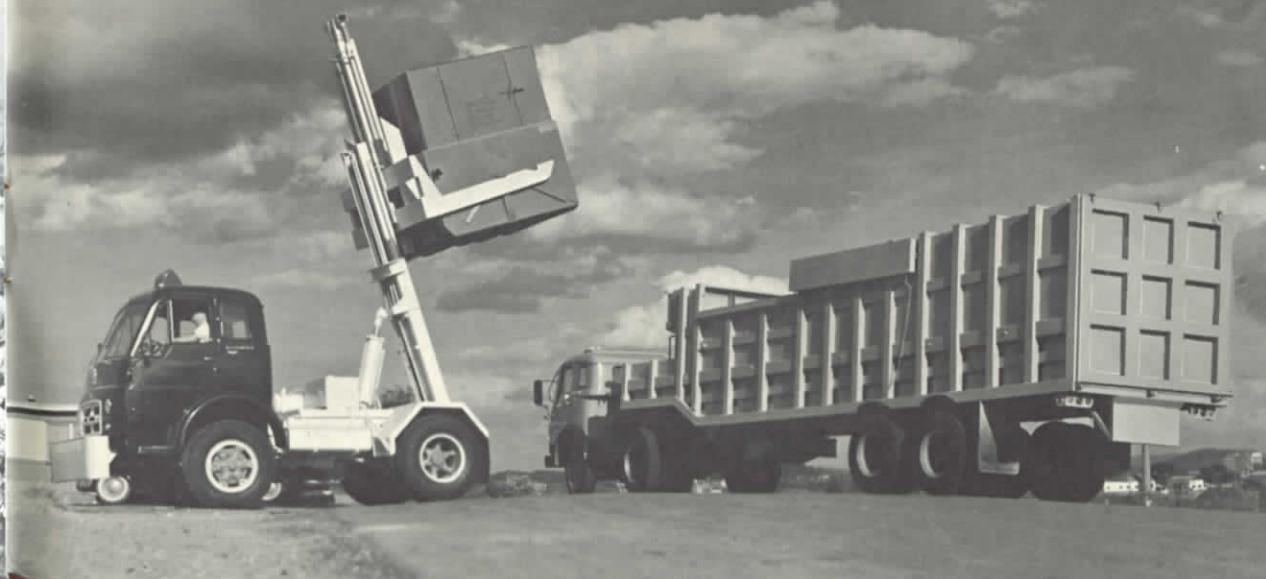


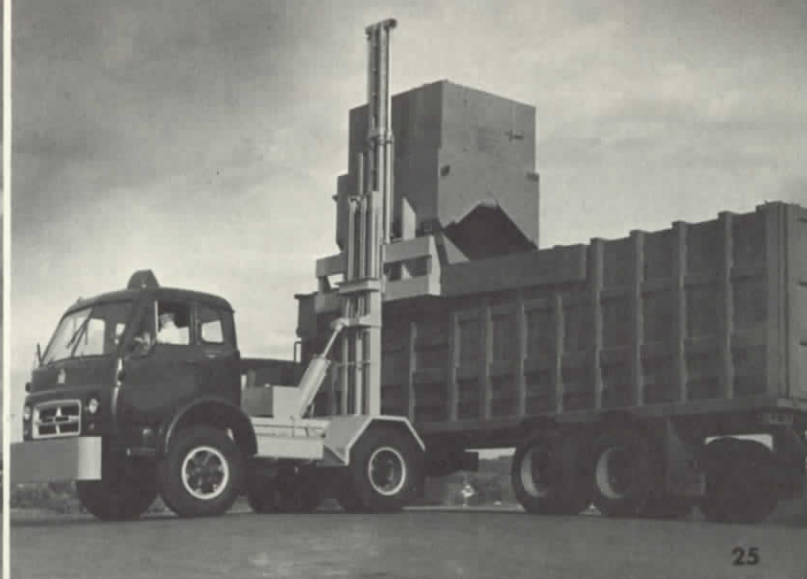
Photo 96, below, shows trailer used with DEMPSTER-DUMPSTER GRD as a portable transfer station. GRD operator backs up to hopper opening.

In photo below, container has been moved into position and is dumping contents into compaction body.

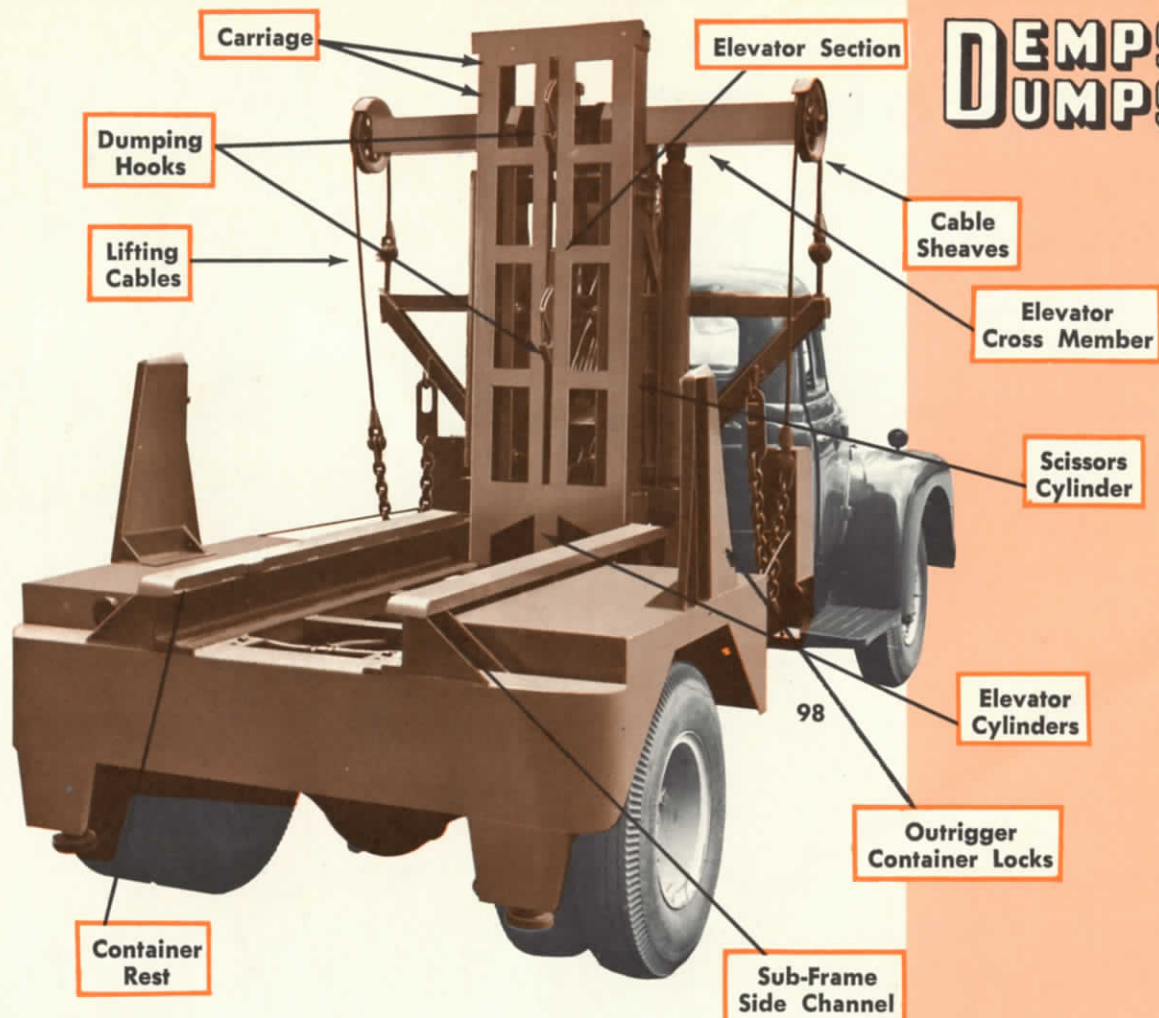
96



97



DEMPSTER DUMPSTER® Type DTLF



The **DEMPSTER-DUMPSTER** Type DTLF performs all the functions found in the Type LFW. Primary difference of the two is that the Type DTLF carries container level and in a more forward position between wheel centers for better load distribution. It is preferred for handling bulk materials of heavy payloads in some large industrial plants; by many scrap metal collectors, as well as some municipalities. The lifting frame is moved forward and backward by means of a scissor-action hydraulic cylinder. The vertical positioning of the frame permits a constant vertical pick-up of loaded container. Container is always in horizontal plane in carrying position, and since loaded container is carried in a more forward position between wheel centers, a better load distribution is possible. An automatically actuated mechanism assures positive locking of container while in carrying position. Three standard models are available, 300-C with a 9,000-lb. capacity, 400-C with a 12,000-lb. capacity and 500-C with a 15,000-lb. capacity. Additionally two models, the 304-C and 404-C, come with a shuttle section that permits high dumping positions.

In photo below, DTLF is backed up to container and lifting links are attached.

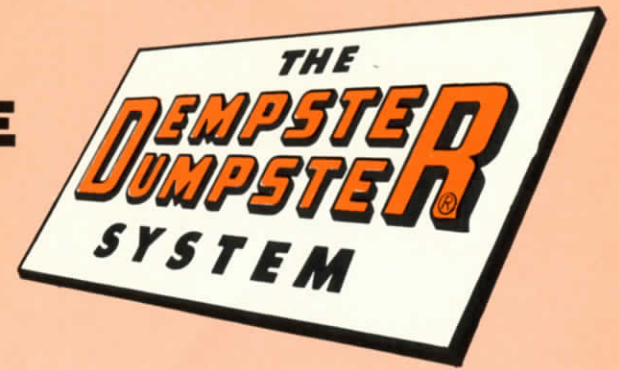
Below, container has been raised vertically from ground.

Scissor-hinged cylinder retracts, pulling container into carrying position.

Container has been moved to the rear and is shown in dumping position.



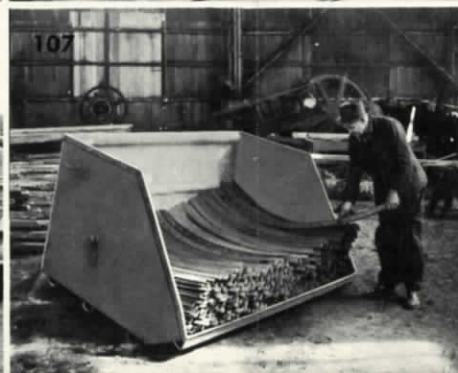
OTHER WORK DONE BY THE



In plants where the DEMPSTER-DUMPSTER is not employed full-time in the handling of containers, it can be used for thousands of materials handling jobs. The addition of a skip-type container, which is open in the back, converts the DEMPSTER-DUMPSTER for use as an open-type truck. In photo 103 iron pipe is being transported from one part of a plant to another. Photo 104 shows raw materials being handled at the Armstrong Cork Co. Photo 106 shows how Manitowoc handles oxygen cylinders. Photo 107 shows a container being loaded with finished bars in a large

steel plant.

One of the most valuable extra jobs performed by the DEMPSTER-DUMPSTER is that of a mobile crane. The Crane Boom Extension that handles this work is attached or taken off in minutes. Photo 105 shows heavy wooden beams being lifted. Photo 108 shows heavy steel beam being placed in a vertical position. Photo 109 shows how heavy material can be loaded from yard position into railroad cars. This DEMPSTER-DUMPSTER has a winch (in circle) which is an advantage in some cases, but is not generally necessary.





FACTORY AND HOME OFFICE OF

DEMPSTER BROTHERS

KNOXVILLE, TENNESSEE

ORIGINATOR AND ONLY MANUFACTURER OF THE

DEMPSTER
DUMPSTER®
SYSTEMS