

**City of Dalton
Public Works Department
535 Elm Street
Dalton, GA 30721**

Curb Sorter Trough Loader

Bid Specifications

SCOPE: It is the intent of this specification to describe a truck mounted trough loaded side dump unit. The unit will be used in a recycling program involving curbside collection of recyclable materials. All equipment furnished under this contract shall be new and unused, and the same as the manufacturers current production model. Accessories not specifically mentioned, but necessary to furnish a complete unit ready for use shall also be included. It is required that the unit, as specified herein, shall be completely assembled, painted, and ready for operation. The equipment furnished shall conform to all ANSI Safety Standards A245.1-1984.

BID SPECIFICATIONS

Bidder shall reply to specifications as EXACT, NO, or EXCEED per item listed.

Bidder shall state specifically ANY AND ALL deviations of specifications on the appropriate page.

GENERAL

BIDDERS RESPONSE

- | | |
|---|-------|
| 1. Four (4) container trough loaded side dump recycling body mounted on a truck chassis 33,000 GVWR recommended with a 38" frame height). | _____ |
| 2. CA - a 186" cab to axle is required. | _____ |
| 3. AF – 121" of after frame is required. | _____ |
| 4. Exhaust - vehicle to be equipped with a vertical exhaust. | _____ |
| 5. Width - approximately 96 inches. | _____ |
| 6. Material - troughs, containers and hoist assembly to be of steel construction. | _____ |
| 8. Must be current model production new unit. No demo or prototypes are acceptable. | _____ |
| 9. Each container to have an independent trough that is used to load that individual container. | _____ |

BIN SIZE AND ARRANGEMENT

<u>Container Location</u>		<u>Yards Capacity</u>	<u>Dump Side</u>
Front	1st	TC42 Compactor	Drivers
	2nd	10.2 cu yd	Drivers
Shallow	3rd	7.75 cu yd	Drivers
	4th	8.0 cu yd – 2-way split	Drivers

TC42 PLASTICS COMPACTOR

1. The compactor ram face width shall be 37.5" with a stroke of 36" and have penetration of 8" into the receiving container. _____
2. Loading shall be from the curbside into a trough with a loading height of no more than 38" based on a frame height of 40". _____
3. The cycle time shall be 14 seconds. With a compaction ratio of 8:1, the approximate un-compacted volume shall be no less than (20) cu.yd. _____
4. Normal operating pressure shall be 1800 PSI with a maximum pressure of 2200 PSI. _____
5. When the under-body hoist is elevated to its maximum dump height of 84" on a 40" frame, it shall achieve a 35" side offset and a 50 degree dump angle. _____
6. An autcycle feature is standard to allow for continual compaction on route. _____

TROUGH OPERATION

1. Each trough shall be capable of elevating while remaining in upright position and dumping into the top center of the container. This trough operation prevents any premature spillage while fully utilizing the volume of each container. _____
2. Each trough shall have the capability of lifting and dumping a 1,000-pound load. _____
3. Loading height of trough to be no more than 38". _____

TROUGH CONSTRUCTION

1. Trough sides and bottom to be constructed of 14-gauge steel reinforced. _____
2. Trough floor sheet to have two drain holes. _____
3. Drive tube. 1" x 3" x 11-gauge rectangular steel tube. _____
4. Trough not to extend out beyond container more than 21-1/2" when operating through its dump cycle. _____

CONTAINER OPERATION

1. Each container shall dump to the side independently. _____
2. Each container shall have the capability to discharge its load at the truck frame height or at any height up to 46" above chassis frame height. (Each container shall have the capability of dumping into a container with up to 84" vertical height with vehicle and container at ground level.) _____
3. A 36" side offset shall be achieved when the hoist is cycled to its maximum dump height. _____

- 4. Each container shall achieve a minimum 50-degree dump angle to permit clean discharge.
- 5. Each container shall have the capability of dumping a minimum 6,000-pound load plus a 50% safety factor
- 6. Container and hoist shall have the ability to overlap into the receptacle 20" when the receptacle has a 74" vertical height.
- 7. Container unloading door shall unlatch and latch automatically during the container tilting (dumping) cycle. This dumping operation shall be performed from within the chassis cab keeping the operator away from moving components.
- 8. Throttle advance shall be automatic.

CONTAINER CONSTRUCTION

- 1. Container sidewalls to be constructed of **double walled** 16 gauge cold rolled ASTM A-366 with reinforcements of 1-1/2" x 3" x 1/8" rectangular tube.
- 2. Container floor to be constructed of 14-gauge steel with reinforcement of 2" x 3" x 1/4" wall long sills with 2" x 4" x 1/4" rectangular tube cross sills.
- 3. Container top loading door is full width and length of each individual container and constructed of 16-gauge steel sheet framed with 1-1/2" x 3" x 1/8" rectangular steel tube. Actuating link truss assembly constructed of 1-1/2" x 3" x 11-gauge rectangular tube.
- 4. Top door hinges on 1-1/4" solid hinge shaft encased in heavy wall round tubing with 2" x 5" x 1/4" rectangular torque tube.
- 5. Hinged unloading door to be:
 - A. Constructed of 16-gauge steel sheet. Framed with 1-1/2" x 3" x 11-gauge rectangular tube.
 - B. Two horizontal corrugations stamped in the sheet.
 - C. Removable 1-1/4" hinge pin designed for ease of replacement.
- 6. Automatic unlatching and latching mechanism driven from the hoist mainframe.
- 7. Latch fingers to be constructed of 3/4" flame cut plate operated by over center cam mechanism.
- 8. Containers (excluding compactor) shall have "full container" viewing windows.
- 9. Containers to have floor liner and wall liner constructed of 1/4" Steel full length of floor and 12 inches up all walls

CONTAINER HOIST CONSTRUCTION

- A. Container hoist assembly must be rated to handle 6,000 pound load plus a 50% safety factor.
- B. Container hoist sub frames to be constructed of 3" x 4" x 1/4" rectangular tube A500 grade C material.
- C. Hoist parallelogram arm links constructed of 1-1/2" x 3" x 3/16" rectangular tube.

- D. Hoist upper parallelogram lift tubes constructed of 3" x 4" x 1/4" wall rectangular tubing A500 grade C.
- E. All pivot points to be constructed of a minimum of 2" OD 7/32" wall outer tube with 1-1/2" cold rolled round 1045 steel pin.
- F. All hoist pivot points to be equipped with threaded grease zerks.
- G. Bottom hoist lift cylinder to be 4-1/2" diameter - two stage – double acting, telescopic with 51" stroke - 1-1/2" pins both ends.
- H. Tilt cylinders on containers larger than 54" wide to be tandem 4" diameter x 12-3/8 stroke. 1-3/4" chrome rod - double acting – 1-1/2" diameter pins - upper scissors assembly to be twin cylinder with full width rectangular tube frame for offset load stability.

TROUGH DRIVE MECHANISM

- A. Trough hoist assembly must be rated to handle 1,000 pounds.
- B. Trough drive arms constructed of 1-1/2" x 3" x 11 gauge rectangular tube with Garlock greaseless bearings 1" round x 1045 pivot shaft.
- C. Trough cylinders to be 2" diameter x 12-3/8" stroke x 1-3/4" chrome rod - double acting - 1" diameter pins.
- D. Trough track bearings to be 1-1/2" diameter cam style with sealed needle bearings.
- E. Lid positioning links to be constructed of 3/4" pipe with 5/8" - 18 threaded stud each end with sealed ball joint yoke 5/8" diameter pin each end.
- F. Trough cylinders and lid positioning links shall be adjustable to give two opening heights to accommodate both trough loading and the ability to handle American style wheeled carts.

HYDRAULIC SYSTEM

- A. Container hydraulic system to be power up power down design.
- B. 10 GPM at 1,000 RPM transmission mounted Hot Shift PTO.
- C. Maximum system pressure not to exceed 2,200 PSI.
- D. System reservoir to be a 20 gallon capacity with 100 mesh 15 G.P.M. suction screen and 10 micron return line filter.
- E. Each container controlled separately by individual solenoid valves for independent container operation.
- F. All hose connections to be JIC or O-ring type. Pipe thread fittings are unacceptable.
- G. Hoses shall be SAE 100R2 with a work rating of 4,000 PSI and a minimum burst pressure of 16,000 PSI.
- H. Overspeed protection shall be provided.

ELECTRICAL SYSTEM

- A. All lights on the body shall be LED and meet FMVSS requirements.
- B. Rear light bar with stop lights, tail lights, turn lights, back-up lights, 3 light cluster and clearance lights.

- C. Sealed electric back-up alarm on rear light bar, 97 db. _____
- D. LED Amber strobe light on top of rearmost bin with brush guard. _____
- E. Dual automatic reset 10-amp circuit breaker. _____
- F. Wire harness system shall be sealed in a protective loom. _____
- G. Rear back-up camera installed _____
- H. Strobe lights or LED flashers on all 4 corners of truck _____

STABILIZER LEGS

- A. Body shall include front and rear stabilizer legs located on the dumping side of the chassis (street side). _____
- B. Stabilizers shall be constructed with a shear pin to eliminate damage in the case of chassis movement with legs extended. _____
- C. Stabilizer controls shall be located inside the cab. An in-cab indicator light shall be located on chassis control panel and shall illuminate whenever either leg is not in a fully retracted position. _____
- D. An alarm shall sound constantly whenever either leg is not in a fully retracted position. _____

MOUNTING

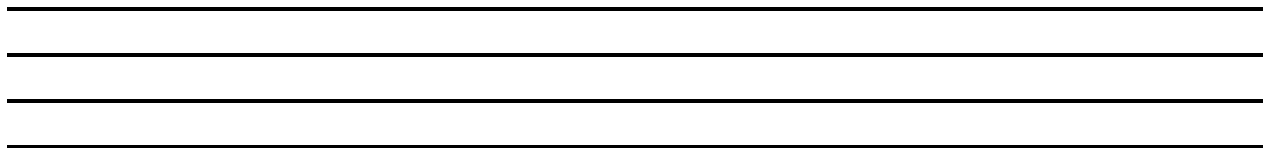
- 1. Body shall be factory mounted in accordance to industry standards. _____
- 2. No welding shall be performed on the chassis frame in the mounting process. _____
- 3. Bidder must provide a copy of proof of product liability insurance. _____

WARRANTY

- 1. Body Manufacturer’s limited warranty shall apply for a period of one (1) year after date of acceptance of the unit. _____

MANUALS

- 1. Must come with complete hard copy parts and service manuals _____



Cab & Chassis for Recycling Collection

SCOPE: It is the intent of this specification to describe a Cab and Chassis with the following minimum specifications considered necessary to perform the work assigned. All equipment furnished under this contract shall be new and unused, and the same as the manufacturers current production model. Accessories not specifically mentioned, but necessary to furnish a complete unit ready for use shall also be included. It is required that the unit, as specified herein, shall be completely assembled, painted, and ready for operation. The equipment furnished shall conform to all applicable FMVSS requirements as set forth by the NHTSA

BID SPECIFICATIONS

Bidder shall reply to specifications as EXACT, NO, or EXCEED per item listed.

Bidder shall state specifically ANY AND ALL deviations of specifications on the appropriate page.

GENERAL

- 1. GVWR 35,000 # Factory Certified
- 2. Wheelbase to meet body manufacturer’s requirements

BIDDERS RESPONSE

FRAME

- 1. Steel frame with steel crossmembers.
- 2. Square end of frame.

ENGINE

- 1. Diesel- Cummins L9 Minimum 300 HP @ 2200 RPM
- 2. 2010-2021 EPA/CARB Emission Certification
- 3. Torque- minimum 860 ft. lb.
- 4. Electronic engine integral shutdown protection system.

TRANSMISSION

- 1. Allison 3000 RDS with (LH) PTO provision.
- 2. Transmission Cooler
- 3. Push Button, Electric shift
- 4. Electrical interface with body builder connector

FRONT AXLE

- 1. Axle / Suspension rated at 12,000 #
- 2. Tapered leaf spring with shock absorbers.
- 3. Factory front alignment.
- 4. Integral power steering.
- 5. Oil lubricated wheel bearings.
- 6. Outboard mounted brake drums.

- 7. Front cam brakes Meritor Q+ 16.5x5.
- 8. Two (2) 22.5x8.25 10-Hub piloted steel wheels.
- 9. Two (2) 11R22.5 14 Ply radial tires.

REAR AXLE

- 1. Axle rated at 23,000 #
- 2. Suspension rated at 30,000 #
- 3. 6.43 rear axle ratio
- 4. Brake cams and chambers on forward side of drive axle.
- 5. Rear cam brakes Meritor Q+ 16.5x7.
- 6. Four (4) 22.5x8.25 10-Hub piloted steel wheels.
- 7. Four (4) 14ply 11R22.5 14 ply tires
- 8. Driver controlled differential lock

BRAKE SYSTEM/ AIR SYSTEM

- 1. Full air with anti-lock brake system.
- 2. Brake Spiders- Cast ONLY front & rear.
- 3. Auto slack adjusters front and rear.
- 4. Non-Asbestos brake lining- Front & Rear.
- 5. Compressor- 18.7 CFM
- 6. Brake line air dryer with heater.
- 7. Steel air tanks
- 8. Pull cord drain valves on all air tanks
- 9. Low pressure warning light and buzzer
- 10. Air brake parking valve handle, located convenient to operator.

AIR CLEANER

- 1. Side of hood air intake with firewall mounted air cleaner.
- 2. Dash mounted air restriction indicator.

EXHAUST SYSTEM

- 1. RH outboard under step mounted horizontal after treatment system w/ RH B-pillar mounted vertical exhaust.
- 2. Engine after treatment device, automatic over the road regeneration and dash mounted regeneration request switch.
- 3. 6-gallon LH mounted exhaust (DEF) fluid reservoir
- 4. Aluminum after treatment device/ muffler/ tail pipe shields.
- 5. Exhaust brake with on/off dash switch

FUEL SYSTEM

- 1. 80-gallon minimum capacity mounted StreetSide
- 2. Fuel water separator.

COOLING SYSTEM

- 1. Coolant protection to -34 degrees Fahrenheit.
- 2. Lower radiator guard.

- 15. All wiring in loom and securely fastened.
- 16. One (1) year warranty on modification.

ELECTRICAL

- 1. 160-amp alternator.
- 2. Positive load power disconnect with cab mounted control switch
- 3. 12-volt system with solid-state circuit protection.
- 4. 2250 CCA maintenance free batteries.
- 5. Body builder wiring harness
- 6. 12v power supply in dash.
- 7. Engine shutdown for low oil pressure, high coolant temperature, low coolant level.
- 8. Automatic reset circuit breakers, insulated wiring harnesses and braided covering, numbered and color-coded circuits.
- 9. Headlights turn signals and marker lights.
- 10. Backup camera with monitor mounted center of dash
- 11. 4 corner and 2 mid mounted strobe lights

COLOR

- 1. Cab exterior: Manufacturers' standard WHITE
 Color Code: _____
- 2. Cab interior: grey- preferred

WARRANTY

- 1. State and ATTACH COPY of standard chassis warranty:
 Months: _____ Mileage: _____ Hours: _____
- 2. State and ATTACH COPY of standard engine warranty:
 Months: _____ Mileage: _____ Hours: _____
- 3. State and ATTACH COPY of standard transmission warranty:
 Months: _____ Mileage: _____ Hours: _____

All equipment is to be factory mounted, F.O.B. City of Dalton Public Works, serviced and ready for operation.

PRICING:

State make and model being bid

BODY: _____

CHASSIS: _____

PACKAGE PRICE \$ _____

Current published literature for chassis and body MUST be provided with the bid

DELIVERY:

ANTICIPATED DELIVERY OF COMPLETE PACKAGE _____ **DAYS**

All bids submitted shall be subject to acceptance or rejection and City of Dalton specifically reserves the right to accept or reject any or all bids, to waive any technicalities and formalities in the bidding.

The undersigned understands that any conditions stated above, clarifications made to the above or information other than that requested should be under separate cover and to be considered only at the discretion of City of Dalton.

Name of Company Representative

Company

Title

Address

Authorized Signature

City, State, Zip Code

Company Phone Number