

INVITATION FOR BID

Bid # 2013-RD102

Tandem Axle Dump Truck

TECHNICAL SPECIFICATIONS

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Tandem Axle Dump Truck

List Model Bid: _____

MINIMUM SPECIFICATIONS

EXCEPTIONS

1. TYPE

- a. Tandem Axle Truck-Current Model Year.
- b. CA=120 inches. To accommodate specified dump body.
- c. GVWR-56,000 lbs. minimum.
- d. Wheel Base-144 inches minimum.
- e. Set back front axle model.

2. AXLES

- a. Front-20,000 lb. minimum rating multi leaf springs with front shocks.
- b. Rear 38,000 lb. minimum rating through hubs. Locking Rear Axel

3. BRAKES

- a. Full Air Brakes-S-Cam Type.
- b. FRONT-S-Cam 16 1/2" x 6".
- c. REAR-S-Cam 16 1/2" x 7".
- d. Rear Chambers-30-30 type - HIGH MOUNTED.
- e. Low pressure warning system.
- f. ABS Brake System.
- g. Haldex Slacker Adjuster.
- h. Air Dryer (AD-IP) Spin-On.
- i. Manual drain valves and auto blow down drain.
- j. Air Compressor-13 CFM minimum.
- k. Parking Brake-On rear axle, spring set with dash mounted control, on both rear axles.

4. CAB EQUIPMENT

- a. Shall be custom interior to include but not limited to:
Full trim panels on doors, back of cab insulation, headliner insulation and cloth seats.
- b. Tilting fiberglass hood one piece
- c. Driver's seat will be cloth and an air suspension, and passenger seat will be a fixed base to match driver seat.
Arm rests both right and left seats.
- d. Retractable seat belts on both driver and passenger seats.
- e. There shall be assist handles on the outside of cab, right and left, stainless steel or equal. Assist handles will also be installed on the inside of the right and left door, stainless steel or equal.
- f. Four-way flashers.

- g. Gauges to include:
 - (i) Air pressure gauge with buzzer.
 - (ii) Voltmeter gauge.
 - (iii) Engine coolant temp gauge with light and buzzer.
 - (iv) Engine oil pressure gauge with light and buzzer.
 - (v) Fuel level gauge.
 - (vi) Electronic speedometer.
 - (vii) Electronic tachometer with hour meter.
 - (viii) Transmission oil temperature gauge.
- h. Rubber floor mats.
- i. Heater and defroster with side tube defrosters.
- j. Dual air horns with single base and a single electric horn.
- k. Tinted windshield.
- l. Rear cab window.
- m. Padded sun visors-right and left.
- n. West Coast Mirrors, RH & LH with stainless arms and brackets.
- o. Convex Mirrors-8" mounted on lower arm of West Coast Mirrors – RH & LH.
- p. Clearance lights-standard configuration.
- q. Air Conditioned Cab.
- r. Electric windshield washer and electric 2speed intermittent wipers.
- s. Steering Wheel-approximately 20".
- t. Radio-Factory installed AM/FM.
- u. Turn signals-Signal stat, self canceling.
- v. Standard factory installed head lights, high and low beam.
- w. Color: White
- x. 2-Way Radio wiring accommodation package Wiring must be at least 12ga to accommodate 40W radio.

5. ELECTRICAL SYSTEM

- a. 12-Volt System.
- b. Batteries-two (2), 12 volt, 1900 CCA at zero degrees.
- c. Battery Box – Steel w/Molded Plastic Cover.
- d. Alternator-Delcotron, 135 AMP 34SI, brushless.
- e. Complete LED, ICC lighting system w/ 2 halogen bulb headlights w/ daytime running lights.
- f. Shall have circuit breakers in lieu of fuses.
- g. Shall have auxiliary harness for front headlights and turn signals for front plow lights.

6. ENGINE

- a. Diesel-350 HP minimum @ 2100RPM.
- b. Tier 3 Engine required – limited electronics
- c. Specify make, model, CID, and HP @ rated RPM.
- d. Displacement-11 Liter minimum.
- e. [Torque-1150ft. lb.](#) @ 1100RPM.
- f. Air intake-inside/outside with in cab control.
- g. Air to air after cooling.
- h. Engine hoses and tubing-Silicone.
- i. Air operated on/off fan clutch.

- i. Fuel/Water separator.
- j. All daily under-hood checks on drivers side of engine.
- k. Oil filter is engine mounted-disposable.
- l. Coolant protection to minus 40F degrees.
- m. Exhaust: Single horizontal muffler. Vertical exhaust, with perforated stainless metal guard. Exhaust pipes must be insulated and routed from cab to reduce in cab heat transfer (Not to reduce cab to axle dimensions and not to force distance between cab and box in excess of 5 inches).
- n. 5yr., 100,000-mile warranty.
- o. Radiator/Grille guard screen 1/4" mesh-stationary type.
- p. Engine to be supplied with a fuel primer pump.

7. CHASSIS

- a. Frame-Single channel 120,000KSI steel.7/16"x3 3/4"x 11 1/8" steel frame (11.11 mm x 95.25mm x 333.38mm).
- b. Side rail section modules 29.1 cu. in. (per rail)
- c. List RBM 2,500,000 lbf-in (per rail) minimum.
- d. Yield strength 120,000 psi. minimum.
- e. Front frame extension must be part of parent rail continuous of main frame (integral).
- f. 20" integral front frame extension or adequate for plow mount installation. Not less than 14 inches from grill.
- g. 14" extension beyond rear of rear tires to accommodate a 14'6" length box.
- h. Two (2) body safety stops.
- i. 2 Tow hooks, front
- j. Fuel Tank-Aluminum Left hand 75 gallon step tank with non-skid tread.
- k. Electronic backup alarm 112db.

8. DIFFERENTIAL

- a. Eaton Locking Differential.
- b. Differential to be geared for 60 mph with specified tires.
- c. No spin rear axle.
- d. Inter-axle differential and lock out with dash-mounted control.
- e. Synthetic gear oil.

9. TRANSMISSION

- a. **Manual Transmission. Revision 2**
- b. Synthetic Transmission Oil "TranSynd TES-295".
- c. **Rev4 Deleted**
- d. PTO Provision constant mesh. **Rev4 (removed Chelsea 67 series)**
- e. Transmission Cooler.
- f. Close ratio ten (10) speed.
- g. Full 2 year warranty.

10. SUSPENSION/SPRINGS/TIRES & RIMS

a. FRONT

- Ø Springs Multileaf Shackle Type-Front 20,000 lb. min. capacity.
- (ii) Front fender flares or extensions.
- (iii) Front Tires – (2) 425/65 R22.5 L rating.
- (iv) Front Rims: Two (2) 12.25 x 22.5 ISO steel disc wheels painted white.

b. REAR SUSPENSION

- (i) Single Reduction 40,000-lb with 200 wheel ends
- (ii) Locking Rear Axle
- (iii) Leaf Springs & Pivot P7
- (iv) Rear Chambers-30-30 type- HIGH MOUNTED.
- (v) Meritor automatic type slack adjusters.
- (vi) (8) Rear Tires- 11R 22.5 H rating 14 ply
- (vii) Rear mud flaps mounted on rear with removable hooks.
- (viii) Fenders over rear tires (installed by body builder).
- (ix) Rear Rims: Eight (8) 8.25 x 22.5 ISO steel disc wheels painted white.
- (x)

11. PAINT

- a. Cab – White.
- b. Frame – Gloss Black.

12. MISCELLANEOUS

Vendors shall provide:

- a. One (1) each of the following written manuals:
 - (i) Parts Manual.
 - (ii) Body Builder Manual.
 - (iii) Shop Service Manual.
 - (iv) Shop Overhaul Manual.
 - (v) Electrical Service Manual with Schematics.
 - (vi) Emission Service Manual.
 - (vii) Service Bulletin with Updates.
 - (viii) Operators Manual.
- b. A complete set of service filters and belts for truck.
- c. On site instruction for two (2) people for servicing of major components such as engine, emissions etc.

DUMP BODY FOR TANDEM AXLE TRUCK

Dump Body shall be a Hi-Way XT3 Type 3 Stainless Steel multi-purpose or Equal.

These specifications shall describe dump body primarily used to haul asphalt. A telescopic hoist mounted at the front of the body provides dumping as per conventional dump body. The unit, as bid, shall be a current design and production unit and conform to all Federal and State regulations. Bidders shall submit current literature for the make and model of unit being bid.

EXCEPTIONS

1. GENERAL DIMENSIONS

- a. Minimum truck capacity of the unit being bid shall be 13 to 15 cubic. Shall be capable of hauling 16 tons of batched asphalt mix, legally (level load)
- b. Body inside length shall be 16' and the inside body width shall be 7' to maximize capacity and provide a lower center of gravity of the unit.
- c. Body weight 3900 lbs approx. and Hoist weight 1200 lbs approx.
- d. Body, sides and front bulkhead – 10 gauge hi-tensile steel
- e. Boxed top rails and corner posts
- f. Sides fitted with pockets for side boards
- g. Side height 36" approx.
- h. Floor 3/16" hi-tensile steel
- i. Floor shall be smooth with 2" radius or 45 degree angle where floor meets sides for clean dumping.
- j. Cross member on 12" centers
- k. **Insulated Dump Body for hauling asphalt. Revision 2**

2. TAILGATE

- a. Tailgate shall be constructed from 8-gauge high-tensile steel sloping gate with lifting bail.
- b. 3/8" spreader chains
- c. Asphalt apron – H.D. 8 gauge steel 12 " long

3. SAFETY AND MISC

- a. Half-Cab protector
- b. Walk Rails on both sides of body 6" to 8" above bottom of body
- c. One safety prop on each side of body
- d. Equipped with "Body Up" indicator lamp mounted on the control console
- e. Body shall be equipped with a;; O.S.H.A. required safety equipment
- f. Caution and Notice decals shall be installed following dump body manufactures instructions

4. HOIST

- a. N.T.E.A/ Class 110 framless front mount with telescoping lift cylinder
- b. Hinge structure integral with truck frame.
- c. Equipped with grease fittings at both end of cylinder for lubrication of pins.
- d. Adjustable (V-Type) packing
- e. Chrome plated sleeves
- f. Lift cylinder 38 tons, 50 degree dump angle
- g. H.D. dump pump with wear plates
- h. Full length pull out cable tube

5. DUMP CONTROLS

- a. Console style control
- b. Hoist – raise, hold, lower
- c. Hoist control lever lock-out
- d. Air operated tailgate release.
- e. Indicator light to alert when engaged

6. P.T.O

- a. The power-take-off shall be a heavy duty air or electric shifted (12V DC) unit mounted to an eight bolt adapter on the bottom of transfer case
- b. Chelsea 420 series or approved equal
- c. The PTO shall be properly installed and adjusted (shimmed) to insure easy shifting and quiet operation
- d. It shall be a wire lock or comparable, installation to prevent the attaching fasteners from vibrating loose.
- e. The PTO shift control shall be mounted in a convenient location in truck cab and be equipped with an indicator lamp (red) to alert the operator when PTO is engaged,
- f. The dump pump shall be mounted to the PTO unit “Piggyback” style. No drive shaft.

7. TARP ASSEMBLY

- a. Electric dump body covering system with underbody spring assisted roll-out.
- b. Direct Drive 12 volt ¼ HP motor – Aero industries model # 500 or approved equal.
- c. Assembly shall be installed following the manufactures installation instructions.
- d. The tarp shall be a heavy duty cover designed for hauling hot paving asphalt.
- e. Tamp shall be lock stitched, waterproof and large enough to extend down and over the sides of the dump body to protect the load.
- f. There shall be protections for securely fastening the tarp for transport.
- g. The tarp can easily and safely operated by a self-centering rotary switch mounted on dump control console.
- h. Tarp mechanism fitted with a wind deflector.
- i. 3 year (non-prorated) warranty on drive motor.
- j. Specify Warranty

8. INSULATED DUMP BODY

- a. The front, tailgate and both sides of dump body shall be insulated to a minimum “R” value of 4.0
- b. The insulating material shall be fiberglass with minimum thickness of 1 ½ “.
- c. Insulating material shall be Owens/Corning T/W Type 2 or comparable.
- d. The insulation shall be able to withstand temperatures of 400 degrees F.
- e. The insulation shall be covered by .040 aluminum sheeting attached to dump body with drill screws.
- f. A test hole for asphalt thermometer shall be provided on each side of dump.

Revision 4 – 09/25/2012

9. LIGHTING/REFLECTING/WIRING

- a. Manufacturer LED's to include stop, tall and turn signal lamps in upper portion of rear corner posts.
- b. Trucklite 6000 series or comparable.
- c. Must meet FMVSS108 standard.
- d. PTO and Dump raises indicator lamps shall be wired to a switch power source.
- e. Electrical wiring shall be enclosed in conduit and attached to body with mechanical fasteners.
- f. Scotch-Lok connectors are NOT acceptable.

10. BODY PREPARATION

- a. Body shall be clean and free of rust, scale, welding slag and oils.
- b. Metal shall be cleaned with a multi-purpose metal cleaner and conditioner. Met-L-Etch or comparable.
- c. Body shall be painted with high gloss acrylic enamel paint with hardener added for durability – Sherwin Williams Uthane
- d. The body shall be painted BLACK
- e. Describe body preparation and finishing process.

Manuals – Operators and Maintenance manuals (2) two each shall be included

Mud Flaps are to included – anti-spray/ flaps

BID FORM (1)

TANDEM AXLE DUMP TRUCK

Bid # 2012-RD102

List vendors included in this bid. _____

Chassis Vendor		
	Make/Model	Price
TRUCK CHASSIS		
DUMP BODY and Hydraulics		
Total Delivered and Assembled Price		
OPTIONS		
Dump body ladder for easy access into dump body. Ladder rungs must be grip strut material 1" minimum width and mounted on the drivers' side of body		
Two way Tailgate		

Company Submitting Bid _____

Date _____

Truck Vendor delivery time from date of order including truck set-up by truck body equipment Vendors: _____ (Approx. # of Days).

***This will be an important factor in bid analysis.

Revision1. Warranties: Please attach a warranty page to your bid specifying various warranties on chassis, engine, transmission, hydraulics, hoist, dump body and all other components. Include cost for various extended warranties where applicable.