

Asphalt Distributor - Hydrostatic - 1900 Gallons

Asphalt Distributor ("Distributor"), truck-mounted, new and of the current model, equipped as advertised by the manufacturer, to meet or exceed the following **MINIMUM** specifications:

Proposed Asphalt Distributor: Make: _____ Model: _____

Proposed Truck and Chassis: Make: _____ Model: _____

Non-Restrictive Clause: Any use of brand name or equal within this specification is to be considered a reference for the purpose of describing the standard of quality, performance, and characteristics desired. It is not intended to limit or restrict competition.

The bidder must respond to each of the following statements. Specifications listed are **minimum** requirements that must be met for a bidder to qualify for an award. A "YES" response means the bidder guarantees that they meet or exceed the requirement. A "NO" response means the bidder cannot meet the requirement and will not be considered. The bidder must supply printed literature that shows compliance with each requirement of the Specifications and, if on inspection, an item is found not to comply, the Distributor will be rejected.

Descriptive literature shall be furnished to substantiate the details specified throughout this bid.

SPECIFICATIONS

Capacity: 1900 gallons with 10 % (percent) allowance for expansion – one-man cab control

Comply Yes/No: _____

Tank And Fittings: Tank to be oval in cross-section with the long axis horizontal. The unit shall be constructed of 10-gauge, grade A steel. All seem to be electrically welded both inside and outside of the tank. The tank shall be supported with 10-gauge surge plates with openings to provide free flow of material to the pump and large enough for a man to crawl through.

The tank shall have a manhole, 20-inch inside diameter with a quick-opening cover that will conform to the Department of Transportation regulation covering cargo tanks transporting hot products (HM-198A). The closure requirement will require the manhole to withstand the pressure, which is developed when the tank is positioned in an upside-down orientation with no significant leakage.

The manhole shall have a strainer for use when filling the tank from overhead.

There shall be a 3-inch diameter overflow, extending at least 6 inches above the liquid and draining internally only through the bottom of the tank in such a location as to clear all chassis members.

A tank overflow design that drains into the spill collar around the manhole is not acceptable.

Insulation to be 2-inch fiberglass or stone wool fiber and have spacers to prevent compression and protected by an aluminum jacket (.040 inches).

The tank mounting shall be full bolster style or full-length steel sills and include aluminum fenders.

Tank gauge to be float type, with dial calibrated in 100-gallon increments, located both front and rear of the tank.

A metal measuring stick, calibrated in 50-gallon increments shall be provided.

The tank shall have a spillage collar and overflow drain, including the refiner's platform and ladder.

The tank design and construction shall meet all applicable US DOT tank regulations.

Comply Yes/No: _____

Tank Trim:

- Ladder - For access to the top of the tank
- Toolbox - All steel, side opening with flush type lock
- Fenders – Full dual flanged fenders (.080-inch aluminum) with rubber flaps. The use of skirting and flaps are not acceptable.
- Rear bumper – 4-inch pressed steel channel located to protect the spray bar. The bumper must meet all Federal Motor Vehicle Safety Standard (FMVSS) requirements.

Comply Yes/No: _____

Circulating System: To be self-flushing and permit the following operations:

Filling tank by pump from an outside source, circulating material in tank independent of the bar, circulating material in the bar, spraying at a constant application rate, regardless of truck speed, transferring between two (2) outside tanks without having material enter distributor tank, hand-spraying, returning the material in spray bar and hand spray to tank, pumping back to supply source, and complete drainage of the pump, circulating system, and spray bar without draining the tank.

It is important that the Distributor be capable of returning all material in the spray bar, hand spray, and distributing lines to the distributor tank by means of pump suction.

The system shall use volumetric metering with no bypass when spraying to ensure the accuracy of the application.

The system shall be made for easily draining the circulating system independently of the tank and for flushing the circulating system and pump.

The system shall have a power wash-down system, including an electric fuel pump, and a 15-foot hose with a gun.

Comply Yes/No: _____

Power Unit: Hydrostatic transmission driven by heavy-duty power take-off (PTO). The pump shall be a variable displacement piston type.

The motor shall be a one or two-speed, low-speed-high torque, geroler type motor.

The power unit shifting controls shall be in the truck cab, transmission to tie truck speed to the distributor pump output, the hydraulic system to have a minimum 20-gallon reservoir equipped with a 10-micron replaceable cartridge type filter, micro-control of hydrostatic transmission for setting pump discharge rate shall be in the truck cab with override control located in the truck cab and at the rear of the unit.

Comply Yes/No: _____

Bitumen Pump: To be a positive displacement, rotary gear type with a minimum capacity of 400 gallons per minute with 4-inch suction by 4-inch discharge. The unit will have a self-flushing line from the fuel tank or heating system to the fill line.

Comply Yes/No: _____

Heating System: Two (2) Flues with two (2) diesel-fired burners, with a minimum of 400,000 BTU per hour per burner capacity. With pressure regulator, valves, piping, and a 52-gallon frame-mounted tank to be furnished.

Comply Yes/No: _____

Spray Bar: Constructed of steel, 16 feet in length, fully circulating, with fold-up end sections to allow the travel width of the bar not to exceed 8 feet. Each folding wing section is to have a 1 or 2-foot non-removable spray bar and an additional two (2) or three (3), one (1) foot removable sections on each wing to give a total of 4 feet of spray bar on each wing.

Each of the sections on the fold-up wing (including the non-removable section) shall be controlled in 1-foot increments and have electric-air on-off controls in the cab. No additional controls for future additional sections or the length of the bar are required.

Lifting, shifting, and wing folding of the bar shall be electric-hydraulic, controlled in the cab. Spray bar extensions 1 foot w/electric air on/off, 16 feet of total bar length set of nozzles 6-9 gallons per minute, set of nozzles 12-21 gallons per minute.

Nozzles shall be spaced on 4-inch centers and shall have an individual valve for each nozzle. Each valve shall have a flip lever control so bar length can be adjusted and allow individual valves to be disconnected without the use of tools or pulling pins. Side wings to spray nozzles shall be multi-material v-slot type. Spray bar section storage box.

Comply Yes/No: _____

Controls: The unit shall be equipped with air controls. The air can be obtained from the air system on the truck chassis. The distributor system shall have its own air reservoir with a check valve set at 80 psi to prevent loss of air on truck chassis breaks in case a line is ruptured. The use of the truck brake system reservoir is not acceptable. The system shall have its own airline oiling device and controls shall be air/electric, located in the cab convenient to the operator.

The in-cab controls shall include:

- Computer-controlled switches for five (minimum) preset application rates
- Distance/volume reset switch
- Application rate adjustment switch
- Display select switch
- On/Off electric-air control switches for 8-foot center section and each of the four (4), 1-foot sections per wing section of spray bar, (no controls for future additional sections or length of the bar).
- On/Off electric hydraulic control switch for shifting, lifting, and wing folding of the spray bar.

The in-cab instrumentation includes the following features on a self-illuminated display:

- Truck travel speed – feet/minute
- Application rate – gallons/square yard
- Pump rate – gallons/minute
- Re-settable distance sprayed – feet
- Re-settable volume sprayed – gallons
- Low tank level warning

Warnings that travel speed and/or application rate are beyond system capability shall be included. The system shall have a radar-type sensor to pick up ground speed.

Comply Yes/No: _____

Hand Spray: The hand spray shall consist of one (1) 25 feet section of 3/4-inch flexible rubber hand spray hose with a hand spray bar having a control valve, three spray nozzles, and a hose reel.

Comply Yes/No: _____

Accessories: Loading connections quick-clamp type for attaching the hose to fill or transfer line

hose trough:

- Pump tachometer
- Tank content gauge
- Two (2) thermometers and outlets
- One (1) 4-inch dial type – 50° degrees to 500° degrees Fahrenheit
- One (1) armored engraved pencil type – 50 °degrees to 500° degrees Fahrenheit in well on the left side.
- One (1) toolbox and all special tools needed for the operation and maintenance of the distributor.
- Fenders
- Liquid sampling valve in the front or rear tank head
- 15 feet of loading hose
- A cone-type strainer in the fill line.
- Lights to meet ICC regulations.
- All standard equipment and accessories

Comply Yes/No: _____

Paint: Painted surfaces to be painted black

Comply Yes/No: _____

Truck Chassis: 33,000 GVWR, wheelbase 188 inches, CA 120 inches, Heavy duty truck with all standard equipment including the following:

- Hydrostatic drive - P.T.O. driven off the transmission.
- Engine – inline diesel, 6 cylinders, 280 horsepower (hp), 700 pound-foot torque minimum
- Extra cooling radiator
- Standard air conditioning - factory installed
- Alternator - 160 amp
- Axle Front - 12,000 pounds
- Axle rear - 21,000 pounds – 5.57/7.60 ratio
- Brake equipment - full air brake with spring set parking
- Compressor - to produce a minimum of 13.2 cubic feet per minute (cfm) of free air
- Conventional cab–air ride drivers, passenger standard
- Frame - reinforced - section modulus - 110,000 psi with 20-inch integral frame extension
- Fuel tank - 55 gallons Any configuration
- Mirrors – powered both RH & LH
- Springs - Front - 12,000 pounds, Rear - 23,000 pounds
- Power Steering
- Front Shock Absorbers
- 6-speed automatic transmission

Comply Yes/No: _____

Tires: All tires must be rated equal to or higher than axle and suspension weight specifications. Steel radial, highway tread, high mileage steer axle type front; all seasons, on-road/off-road, high mileage rear drive axle type duals and spare.

Comply Yes/No: _____

Wheels: 10-hole disc or 5-hand hub pilots steel disc

Comply Yes/No: _____

Accessories & Other Equipment:

- 12-volt power outlet
- Hour meter
- Spare wheel
- Lights to meet ICC regulations
- Armrest RH & LH assist handle RH & LH
- Electric tachometer
- Ammeter gauge
- Oil pressure gauge
- Sun visor RH & LH
- Tilting hood
- Dual air horn
- Turn signal lamps- dual face
- Fender-mounted
- Amber mini light bar: mounted to the cab or cab protector and controlled from the up-fitter switch.
- A panel in the cab
- Four-corner strobe light kit
- AM/FM radio
- Ability to heat bitumen pump from the truck cooling system.
- 2-inch dial and pencil-type thermometer
- Power wash down system with hose and wand
- Wet storage box with hinged cover and drain plug.
- 12 feet by 3 inches rubber fill hose/ 3-inch male thread on each end
- Electronic backup alarm.

Comply Yes/No: _____

ADDITIONAL REQUIREMENTS

Service: The Distributor shall be delivered fully assembled and ready to operate. Factory-trained dealer representative is to inspect The Distributor upon delivery and provide receiving MDOT equipment manager with information on operational, service, and maintenance requirements.

Bidder shall maintain a representative inventory of replacement parts and service facilities as well as all necessary diagnostic tools/equipment/software and software licenses needed for diagnosis, repair, service, and maintenance.

Acknowledge Yes/No: _____

Warranty: Clearly stated terms and conditions of all manufacturer warranties shall be included with the bid package. All materials, specialty equipment, or accessories that prove defective in normal operation within the warranty period shall be replaced or repaired by the manufacturer free of all cost to MDOT, including all material, labor, and transportation costs. Warranty replacement and/or repairs shall be furnished promptly by the successful bidder within a time not to exceed thirty (30) calendar days. **The bidder shall provide written assurance with the bid package regarding warranty repairs.**

The delivering dealer will have sole warranty responsibility (**all components**) for the first ninety (90) calendar days after acceptance of equipment.

The manufacturer shall provide, with the bid package, a list of warranty service locations within the State of Mississippi for all components of The Distributor (body, chassis, electrical, etc.) which may need warranty repair beyond the first ninety (90) calendar days.

Acknowledge Yes/No: _____

Workmanship: Workmanship throughout shall conform to the highest standard of commercially accepted practice for

the class of work and shall result in a neat and finished appearance. The design which the manufacturer proposes must be of substantial and durable construction in all respects.

All parts shall be new. Used, reconditioned, or obsolete parts will not be accepted.

Acknowledge Yes/No: _____

Parts Availability: Dealer name and contact information located closest to the point of delivery:

Dealer Name: _____

Telephone: _____

Street Address: _____

City, State, ZIP: _____

Acknowledge Yes/No: _____

Tests and Testing: The complete Distributor and all working and moving parts and operating devices shall be thoroughly tested and put in operating condition by the manufacturer.

Prior to acceptance by MDOT, the manufacturer shall service and adjust the Distributor for operation.

Acknowledge Yes/No: _____

Literature:

Technical manuals: Operator's manual, service/maintenance manual, and parts book are to be made available in both hard copy and electronic (PDF file format on USB flash drive) versions. One set of technical manuals shall be provided with each Distributor upon delivery. Additional manuals may be ordered later.

Technical service bulletins: Successful bidder shall provide TSBs (technical service bulletins) for each Distributor(s) delivered to MDOT as they are published, regardless of the date of delivery. TSBs may be furnished in paper or electronic format and shall be updated regularly.

The following additional information shall be provided by the vendor at time of delivery (electronically if possible):

- Manufacturer's recommended service/preventive maintenance intervals
- Recommended fluids, lubricants, and their SAE equivalents

Two (2) copies of descriptive literature shall be furnished to substantiate the details specified in the bid.

Acknowledge Yes/No: _____

Certification: The manufacturer(s) shall furnish certification that the Distributor meets or surpasses current U.S. Department of Labor Occupational Safety and Health Administration (OSHA) Regulations, U.S. Department of Transportation Federal Motor Vehicle Safety Standards (FMVSS), and any other applicable Federal regulations.

Acknowledge Yes/No: _____

NOTE: The Mississippi Department of Transportation is exempt, by way of contractual purchases, from Regulation Eleven and the protections provided by the Mississippi Motor Vehicle Commission. A written notice, established by public hearing on April 21, 2010, at 10:00 a.m., is on file with the Mississippi Motor Vehicle Commission, 1755 Lelia Drive, Suite 200, Jackson, MS 39216.

As a second stage or “specialty vehicle” manufacturer, you are not required to hold a Mississippi Manufacturer or Dealers’ License and if you choose, may sell the finished motor vehicle directly to the Mississippi Department of Transportation.

Acknowledge Yes/No: _____

Vehicle Title or Certificate of Origin:

Assignment: State of Mississippi/DFA – 941

Mailing address: Mississippi Department of Transportation, 9301
P.O. Box 1850
Jackson, MS 39215

Acknowledge Yes/No: _____

Lienholder: Upon award, if MDOT issues a **Notice to Proceed** instead of a **Purchase Order**, The Distributor is being purchased through the State’s Master Lease Purchase Program and the specified financial institution must be listed as Lienholder.

Acknowledge Yes/No: _____