



STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
TECHNICAL SPECIFICATIONS FOR

TRUCK, CAB & CHASSIS, 35,000# GVWR, ASPHALT DISTRIBUTOR

SERIES NO. 215-000

REV. 3/13/2024

EQUIPMENT SPECIFICATION 215-000A

GENERAL

This specification sets forth the minimum requirements for a truck, cab & chassis, 35,000# GVWR with a truck mounted asphalt distributor.

Equipment shall be new, a production model of current manufacture, and must meet all state and Federal safety and emission standards in effect at time of order.

REPRESENTATIVE SPECIFICATIONS

An International MV607 chassis and an Etnyre Black-Topper® Asphalt Distributor System with appropriate options and standard features, was used to develop these specifications and establish equivalency evaluation criteria.

Equipment of similar style, type, character, quality, features, and purpose conforming to the following detailed requirements/specifications will be considered. For evaluation purposes, bidders proposing an exception/equivalent option/feature to those specified herein, may be required to provide manufacturer/product information (catalogue sheets, detailed specifications, pictures, etc.). This information will be evaluated against the minimum requirements of this specification. Proposed submittals that are determined not to be equivalent to the established criteria will be rejected.

LOUISIANA AUTHORIZED DEALER(S)

Proposed item(s) must be from a manufacturer who has at least one (1) authorized dealer within the State of Louisiana where parts and service can be obtained. Authorized dealer(s) must have properly trained technicians plus all other resources necessary to perform warranty and repair services in complete accordance with the manufacturer's requirements. A letter certifying the ability to meet this requirement, inclusive of the company name(s) and address(es) of the Louisiana authorized dealer(s), should be supplied with the bid submittal and may be required prior to award.

DELIVERY & ACCEPTANCE

Vendor shall perform a test run of each unit to verify that all features and capabilities are operating properly at time of delivery. Documentation of testing may be required prior to acceptance by the Department.

Unit(s) must be delivered completely assembled (including all components, accessories, etc.) and ready for operation without any additional preparation including, but not limited to, ensuring all fluid levels are at their full mark, fuel tank(s) is full, all necessary lubrication has been performed, etc. A Louisiana safety inspection shall be performed on each vehicle prior to delivery and a Louisiana safety inspection sticker properly affixed.



Any unit delivered under this specification is subject to rejection if there is evidence of poor workmanship, by either the vendor or the original manufacturer. Noted defects and/or nonconformance findings may be corrected by the vendor. Corrections must be completed and approved by the Equipment Engineer or his representative prior to final acceptance.

Unit(s) shall be delivered "**on the ground**;" DOTD will not unload nor provide any unloading equipment to the vendor/delivery driver in order to offload the unit(s).

NOTE: The Department will have space available for equipment to be unloaded.

EACH UNIT MUST BE SUPPLIED WITH THE FOLLOWING DOCUMENTATION AT TIME OF DELIVERY:

1. Notarized Bill of Sale
2. Original Certificate of Origin (MSO), (no photocopy)
3. Dealer's Service Policy
4. Owner's/Operator's Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: PDF delivered via USB "Flash Drive", or E-mail
5. Service Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: PDF delivered via USB "Flash Drive", or E-mail
6. Build Sheet(s) – as applicable
 - a. One (1) Hardcopy
 - b. Build sheets should be written in plain language (not company specific codes) and include, at a minimum, all standard & optional features of the delivered unit.

NOTE: Invoices will not be processed for payment until the unit(s) have been inspected by the Equipment Engineer or their representative and deemed in compliance with the specifications.

BID SUBMITTALS

Any additions, deletions, or variations from the specifications should be noted in the "Bidder's Exceptions" page of this specification. Exceptions that are noted to be less than a minimum requirement will not be accepted.

Any additions, deletions or variations from the manufacturer's standard published specifications should be noted on the "Bidder's Exceptions" page of this specification. Unless otherwise noted, any items appearing in the manufacturer's standard published specifications furnished by the Bidder are assumed to be included in the Bidder's submittal.

Bidder should note on their submittal any installation(s) to the equipment that will be performed by the vendor instead of the manufacturer.

Failure to note any specification exceptions, manufacturer specification alterations, and/or vendor installations prior to award may result in rejection of the equipment at the time of delivery.

THE NUMBER OF DELIVERY DAYS AFTER RECEIPT OF ORDER (ARO) MAY BE USED AS A FACTOR IN THE AWARD.

EQUIPMENT SPECIFICATIONS

NOTICE TO BIDDERS

Bidder should review the detailed "Equipment Specification" completely and respond to the compliance question at the end of each section by marking "X", in the space provided, for "Yes" or "No". Mark "Yes" to indicate that the equipment bid meets the section exactly as specified. Mark "No" if there are exceptions to any part of that section. Exceptions/deviations to any part of the specification are to be detailed on the "Bidder's Exceptions" page of this specification.

IN ORDER TO BE CONSIDERED FOR AWARD, BIDDER SHOULD RETURN THIS SPECIFICATION, COMPLETED IN FULL, WITH THEIR BID SUBMITTAL.

Note: All values listed below are minimums unless noted otherwise.

1. Cab & Chassis

1.1. GVWR: 35,000 lbs.

Comply: Yes No

1.2. Frame: 2,000,000 RBM (Resisting Bending Moment) - Bidder should list section modulus and yield strength below

Section Modulus: _____ Yield Strength: _____

Comply: Yes No

1.3. Cab & Axle Positions

1.3.1. Front axle: For the purposes of this solicitation, set-forward-axle (SFA) is considered equal to set-back-axle (SBA); however, SBA is the preferred option

1.3.2. Wheelbase: 187"

1.3.3. Cab to Axle (CA): 120" clear

1.3.4. Values given here are minimums. Truck vendor and Asphalt Distributor manufacturer shall coordinate in selecting a wheelbase and cab to axle dimension that is compatible with the required body length and ensures proper load distribution to the axles in accordance with manufacturer and industry practice.

Comply: Yes No

1.4. Front Bumper

1.4.1. Full width all-steel front bumper

1.4.2. Two (2) frame mounted tow hooks, one on each frame rail

Comply: Yes No

1.5. Cab

1.5.1. Conventional day cab

1.5.2. Tinted safety glass

EQUIPMENT SPECIFICATIONS

- 1.5.3. Full width exterior cab mounted sun shade with integral clearance lights
- 1.5.4. Cab entry handles, driver & passenger side
- 1.5.5. Outside mirrors, driver & passenger side
- 1.5.6. Power adjustable
- 1.5.7. 90 sq. in. minimum
- 1.5.8. Heated with integrated turn signals
- 1.5.9. Two (2) adjustable spot mirrors, one (1) per outside mirror
- 1.5.10. Two (2) roof mounted air horns & one (1) standard electric horn
- 1.5.11. Air ride: driver and passenger seat, cab suspension
- 1.5.12. Driver and Passenger seat to be high back with lumbar support
- 1.5.13. Manufacturer's highest level sound insulation package
- 1.5.14. Wing dash, if available
- 1.5.15. Gauge package including the following gauges:
 - 1.5.15.1. Air cleaner restriction
 - 1.5.15.2. Coolant temperature
 - 1.5.15.3. DEF - only if DEF is required to meet emission standards
 - 1.5.15.4. Fuel
 - 1.5.15.5. Oil pressure
 - 1.5.15.6. Primary and secondary air pressure
 - 1.5.15.7. Speedometer
 - 1.5.15.8. Tachometer
 - 1.5.15.9. Voltmeter
 - 1.5.15.10. Gear indicator
 - 1.5.15.11. Odometer
 - 1.5.15.12. Total engine hours
 - 1.5.15.13. Trip hours
 - 1.5.15.14. Trip odometer
 - 1.5.15.15. Rear axle oil temperature
 - 1.5.15.16. Auto transmission oil temperature
 - 1.5.15.17. Engine oil temperature
- 1.5.16. Dual sun visors
- 1.5.17. Two (2) cup holders, integral to dash
- 1.5.18. 3-point seat belt for each seat. All seat belt webbing must be manufacturer's high visibility color (orange, red, green, or yellow).
- 1.5.19. Climate control, including air conditioning, heater, & defroster
- 1.5.20. Power windows & power door locks
- 1.5.21. Tilting and telescoping steering wheel

Comply: ___ Yes ___ No

1.6. Engine

- 1.6.1. 8.9 L, electronic diesel, turbocharged, liquid cooled, 6-cylinder inline configuration
- 1.6.2. 330 HP, 1000 FT-LBS
- 1.6.3. Engine must include compression/turbo exhaust brake

EQUIPMENT SPECIFICATIONS

- 1.6.4. Emission system must comply with emission standards in effect as of date manufactured
- 1.6.5. DEF tank to be located on driver's side next to fuel tank
- 1.6.6. DEF tank must have a minimum capacity of 7 gallons
- 1.6.7. DEF tank protected with Stainless Steel or similar cover to prevent corrosion
- 1.6.8. Engine must be biodiesel compatible
- 1.6.9. Horizontal exhaust after-treatment (DPF) with vertical tail pipe with tailpipe guard

Comply: Yes No

1.7. Fuel System

- 1.7.1. Fuel tank shall be metal with drain and a 50-gallon minimum capacity; tank should be located on driver's side; tank straps stainless steel to prevent corrosion
- 1.7.2. Davco fuel processor or equal - mounted to outside of frame
- 1.7.3. Visual element change indication that is integral to and non-removable from unit (to be located on driver's side near fuel tank)
- 1.7.4. Water-in-fuel sensor with indicator in cab
- 1.7.5. Entire fuel system must be biodiesel compatible

Comply: Yes No

1.8. Transmission

- 1.8.1. Automatic, Allison 3500 RDS wide ratio 6 speed or equal
- 1.8.2. Must include PTO aperture
- 1.8.3. To be filled with manufacturer approved synthetic lubricants
- 1.8.4. Transmission control module to be mounted in cab to protect from corrosion
- 1.8.5. Transmission cooler lines to be made of stainless steel

Comply: Yes No

1.9. Gearing, Speed Governing & Performance

- 1.9.1. Top gear road speed shall be electronically governed at 75 mph maximum
- 1.9.2. Cruise control speed shall be governed at 72 mph maximum
- 1.9.3. Transmission and axle ratio shall be selected for performance to be optimized at 65 while permitting truck to operate up to 75 MPH on highway without excessive engine speed. Transmission and axle ratio shall also allow truck to accomplish 0.5 to 1.5 MPH forward speed at approximately 1200 RPM engine speed

Comply: Yes No

1.10. PTO

- 1.10.1. PTO with pump that meets requirements of the spray unit mounted to truck
- 1.10.2. PTO must be air shifted and compatible with specified transmission
- 1.10.3. PTO must be activated by dash mounted factory upfitter switch

Comply: Yes No

EQUIPMENT SPECIFICATIONS

1.11. Front Axle

- 1.11.1. 12,000 lbs. GAWR @ ground capacity (6,000 lbs. capacity per spring @ ground)
- 1.11.2. Shock absorbers
- 1.11.3. Integral power steering
- 1.11.4. Wet-type, visible cap axle seals, Stemco or equal
- 1.11.5. Axle should be filled with manufacturer approved synthetic lubricants

Comply: Yes No

1.12. Rear Axle

- 1.12.1. Single speed, 23,000 lbs. GAWR @ ground capacity
- 1.12.2. Air-ride suspension
- 1.12.3. Shock absorbers
- 1.12.4. Axle should be filled with manufacturer approved synthetic lubricants

Comply: Yes No

1.13. Brakes

- 1.13.1. Full air disc brake system, ABS brake system with traction control
- 1.13.2. 18 CFM air compressor
- 1.13.3. Bendix AD-9SI air dryer or equal
- 1.13.4. Advanced driver assistance system, Bendix Wingman[®] or approved equal with the following:
 - 1.13.4.1. Collision mitigation system
 - 1.13.4.2. Stationary vehicle braking system
 - 1.13.4.3. Lane departure warning system

Comply: Yes No

1.14. Wheels & Tires

- 1.14.1. Hub piloted steel disc, size - 8.25 X 22.5
- 1.14.2. First line, first quality tires, size – 11R22.5
- 1.14.3. Front tires - single highway tread
- 1.14.4. Rear tires - dual on/off road tread
- 1.14.5. Load ratings to be compatible with GVWR
- 1.14.6. Spare tire, jack, & lug wrench are NOT required

Comply: Yes No

1.15. Electrical System & Lights

- 1.15.1. 12-volt system
- 1.15.2. 165-amp brushless alternator
- 1.15.3. Batteries with 2200 CCA combined, maintenance free, top threaded stud
- 1.15.4. Aluminum battery box with plastic cover
- 1.15.5. Remote jump start studs, with tethered protective caps, located outside of the battery box
- 1.15.6. Battery disconnect switch, located inside cab, near driver's seat, similar to the below picture.

EQUIPMENT SPECIFICATIONS



- 1.15.7. Battery discharge protection
- 1.15.8. Four (4) dash mounted, rocker-style, factory installed, body circuit switches (upfitter switches) for simple on/off functions for accessories (PTO, warning lights, etc.; one (1) assigned to activate the PTO; one (1) assigned to operate the flashing warning lights; two (2) blank to be assigned by DOTD personnel.
- 1.15.9. All exterior lighting should be LED
- 1.15.10. Headlights:
- 1.15.11. Automatic daytime running lights
- 1.15.12. Automatic on if windshield wipers are turned on
- 1.15.13. Automatic on with low ambient light levels
- 1.15.14. Warning buzzer/alarm when headlight switch is on and ignition switch is in off position
- 1.15.15. Cruise control
- 1.15.16. Intermittent windshield wipers with washers
- 1.15.17. Self-cancelling directional signals
- 1.15.18. Backup alarm, 97 dba
- 1.15.19. AM/FM/WB radio with auxiliary front input, Bluetooth/hands free function and steering wheel controls
- 1.15.20. Two (2) 12V accessory power outlets with covers, mounted in dash (for cell phone chargers, GPS devices, etc.)

Comply: ___ Yes ___ No

1.16. Paint

- 1.16.1. Cab: Manufacturer's standard white
- 1.16.2. Chassis: Manufacturer's standard black
- 1.16.3. Cab and Frame treated for corrosion mitigation which will include: all access holes created before primer coat application, weld through epoxy sealant applied, Intercoat® Chemguard or equivalent coating applied to all corrosion prone areas, Line-X® or equivalent applied to floor inside cab , corrosion resistant frame rails

Comply: ___ Yes ___ No

1.17. FMCSA/DOT Mandated Safety Items

- 1.17.1. One (1) UL listed, 5 B:C rated, or higher, fire extinguisher securely mounted in cab
- 1.17.2. One (1) set of three (3) bidirectional reflective triangles conforming to FMVSS No. 125
- 1.17.3. At least one (1) spare fuse for each type/size used in the truck

Comply: ___ Yes ___ No

EQUIPMENT SPECIFICATIONS

Note: The truck vendor and attached equipment manufacturer/vendor must mutually resolve any unexpected truck/attached equipment component conflict with a sound and functional solution as a requirement of this specification.

2. Asphalt Distributor

2.1. General

- 2.1.1. Truck mounted distributor
- 2.1.2. 2000 gallon capacity tank
- 2.1.3. Hydraulically driven pump system
- 2.1.4. In-cab computer with controls for one person operation
- 2.1.5. LPG heating system with two (2) U-type return flues
- 2.1.6. Pump system capable of pumping a minimum of 400 gallons/minute (GPM)
- 2.1.7. Distributor shall use volumetric metering with no bypass when spraying
- 2.1.8. Distributor shall be equipped with air controls for the spray and circulating system

Comply: ___ Yes ___ No

2.2. Tank

- 2.2.1. Tank design and construction to meet all applicable Federal Cargo Tank Regulations 49 CFR 173.247 including DOT-406, HM-183, HM-198A with consideration for hot asphalt products. Tank must have ASME approval number
- 2.2.2. 2000 gallon capacity
- 2.2.3. Tank shall be oval in cross section
- 2.2.4. Tank to be mounted with long axis horizontally
- 2.2.5. Tank shell to be ten (10) gauge steel
- 2.2.6. Tank Heads to be ten (10) gauge steel, deep dished and flanged
- 2.2.7. Heads of tank welded to tank shell both inside and outside
- 2.2.8. Full Section Surge Plate
 - 2.2.8.1. Deep dished and flanged
 - 2.2.8.2. Constructed of 10 gauge steel
 - 2.2.8.3. Surge Plate shall have openings of a size large enough for a man to crawl through
- 2.2.9. Manhole with a 20" inside diameter with quick opening cover and strainer
- 2.2.10. Overflow
 - 2.2.10.1. Minimum of 3 inch in diameter
 - 2.2.10.2. Overflow must extend a minimum of six(6) inches above liquid
 - 2.2.10.3. Overflow to drain internally through the bottom of the tank
- 2.2.11. Tank Insulation
 - 2.2.11.1. 2 inch fiberglass
 - 2.2.11.2. 1 lb. density
 - 2.2.11.3. Insulation spacers to prevent compression
 - 2.2.11.4. Insulation protected by aluminum jacket sheet of .040 thickness
- 2.2.12. Tank to be mounted on saddles which are full bolster style
- 2.2.13. Tank gauge
 - 2.2.13.1. Float type

EQUIPMENT SPECIFICATIONS

- 2.2.13.2. Tank gauge dial calibrated in 50 gallon increments
- 2.2.13.3. Tank shall have two (2) gauges located on front and rear of tank
- 2.2.14. Tank shall include refiners platform and ladder
- 2.2.15. Tank to have 4 inch dial thermometer

Comply: Yes No

2.3. Heating System

- 2.3.1. Liquid petroleum gas (LPG) heat system
 - 2.3.1.1. Include pressure regulator, valves and piping
 - 2.3.1.2. Include a 52 gallon tank mounted on the frame
- 2.3.2. Heating system to be two(2) flue style
- 2.3.3. Flues to be U shaped running the full length of the tank
- 2.3.4. Inlet and exhaust opening of each flue to be in the same horizontal plane
- 2.3.5. Flues to have stainless steel external stack
- 2.3.6. Heating LPG system to include pressure regulator, valves and piping

Comply: Yes No

2.4. Power Unit

- 2.4.1. Hydrostatic type (closed loop hydraulic system)
- 2.4.2. Pump
 - 2.4.2.1. Infinitely variable displacement pump
 - 2.4.2.2. Minimum displacement 3.1 cubic inch/revolution
 - 2.4.2.3. Electronic stroker control
 - 2.4.2.4. Axial piston type
- 2.4.3. Pump driven by Power Take Off (PTO) on truck transmission
- 2.4.4. Hydraulic oil cooler for hydraulic system
- 2.4.5. Motor
 - 2.4.5.1. Piston Motor with Gearbox
 - 2.4.5.2. 1.53 cubic inch/revolution displacement
 - 2.4.5.3. Motor to Asphalt pump connection – direct coupled
 - 2.4.5.4. Maximum Revolution per Minute (RPM) 2800
 - 2.4.5.5. Maximum operating temperature – 200 degrees
 - 2.4.5.6. To be fitted with relief valve
 - 2.4.5.7. High hydraulic oil temperature signal in cab of truck

Comply: Yes No

2.5. Hydraulic Lines and Hoses

- 2.5.1. Line and Hose installation to be made according to manufacturer's recommendations
- 2.5.2. A 10 micron replaceable cartridge filter with vacuum gauge shall be located in the line between oil reservoir and hydrostatic pump

Comply: Yes No

EQUIPMENT SPECIFICATIONS

2.6. Hydrostatic System Controls

- 2.6.1. In truck cab electronic micro-control of hydrostatic system to allow for setting of asphalt pump discharge rate
- 2.6.2. Hydraulic solenoid valves to be ground accessible
- 2.6.3. Control capable of stopping the variable pump discharge without disconnecting drive
- 2.6.4. Override of the micro-control to allow increases in asphalt pump output for filling, sucking back, etc.
- 2.6.5. Override shall not affect application rate setting
- 2.6.6. Override shall be located at rear of unit

Comply: Yes No

2.7. Hydraulic Reservoir

- 2.7.1. Minimum 20 gallon hydraulic oil reservoir
- 2.7.2. Reservoir to have temperature indicator on reservoir
- 2.7.3. Reservoir to have level indicator on reservoir

Comply: Yes No

2.8. Circulating System

- 2.8.1. Asphalt Pump
 - 2.8.1.1. Asphalt pump to be a positive displacement rotary gear type
 - 2.8.1.2. Pump shall have a 4 ½" suction and a 4" discharge
 - 2.8.1.3. Mounted below the bottom level of tank
 - 2.8.1.4. Pump must be capable of complete drainage when tank valve is closed
 - 2.8.1.5. Minimum capacity of pump to be four hundred(400) gallons per minute
- 2.8.2. Twenty(20) gallon diesel oil tank for self-flushing system to clean asphalt pump
- 2.8.3. Self-flushing system to return diesel oil to tank after flushing pump, self-contained
- 2.8.4. Asphalt Control Valve
 - 2.8.4.1. Single 4-way cast plug type
 - 2.8.4.2. Bolt directly to bottom of asphalt pump
 - 2.8.4.3. Controlled by in-cab controls

Comply: Yes No

2.9. Spray Bar

- 2.9.1. Variable width spray bar to be 18 feet
- 2.9.2. Variable width spray bar- two (2) 8 foot center bars with left and right folding extensions to achieve a total 18 foot width
- 2.9.3. Spray bar body to be 3 inch square tubing
- 2.9.4. Spray bar to be full circulating
- 2.9.5. Spray bar to be hinged to permit folding
- 2.9.6. Spray bar in folded position not to exceed 8 feet
- 2.9.7. Cab controls for electric-air solenoids to allow for 1 foot spray width control
- 2.9.8. Cab controlled electric-hydraulic shifting, lifting and wing folding of spray bar
- 2.9.9. Spray bar shall have a "tack" feature which allows one control to disarm every other nozzle

EQUIPMENT SPECIFICATIONS

- 2.9.10. Nozzles to be spaced on 4 inch centers on spray bar
- 2.9.11. Individual valve for each spray nozzle with flip lever control for spray width adjustment
- 2.9.12. Right and Left side wings relieve both fore and aft up to 90 degrees
- 2.9.13. Right and Left sections to be interchangeable
- 2.9.14. Nozzle slots to be 30 degrees from spray bar
- 2.9.15. Swivel joints to be O-ring seal type
- 2.9.16. Spray bar to have safety breakaway
- 2.9.17. Spray bar to have 32 inches of side shift – in cab controls for side shift
- 2.9.18. Spray bar to adjust for positive or negative crown
- 2.9.19. Powered spray bar latch with controls on rear of distributor and in-cab control
- 2.9.20. Tank Suction Valve
 - 2.9.20.1. Valve to be located at bottom of tank
 - 2.9.20.2. Valve to be air control open, spring close

Comply: ___ Yes ___ No

2.10. Air Controls

- 2.10.1. Distributor shall be equipped with air controls
- 2.10.2. Air system on truck shall supply air for controls
- 2.10.3. Distributor air system shall have an air tank separate from truck chassis
- 2.10.4. Distributor air system shall have safety valve set at eighty (80) PSI to protect truck chassis air supply
- 2.10.5. Distributor air system to have air line oiling and water separator device separate from truck air system
- 2.10.6. Air solenoid valves to be mounted to be accessible from the ground

Comply: ___ Yes ___ No

2.11. Controls/ Instrumentation

- 2.11.1. Computer with in-cab controls
 - 2.11.1.1. Computer shall allow a minimum of 10 preset application rates
 - 2.11.1.2. Distance/ volume reset switch
 - 2.11.1.3. Application rate adjustment switch
 - 2.11.1.4. Display select switch
- 2.11.2. Instrumentation in-cab shall allow for the following data to be displayed
 - 2.11.2.1. Truck travel speed in feet/minute
 - 2.11.2.2. Application rate in gallons/ square yard
 - 2.11.2.3. Pump rate in gallons/minute
 - 2.11.2.4. Resettable distance sprayed in feet
 - 2.11.2.5. Resettable volume sprayed in gallons
 - 2.11.2.6. Low tank level warning
 - 2.11.2.7. Travel speed and/or application rates beyond system capability alarm
 - 2.11.2.8. Liquid asphalt temperature digital display on in-cab computer display
- 2.11.3. Radar type sensor to sense ground speed
- 2.11.4. 4 way asphalt valve control by in-cab system

Comply: ___ Yes ___ No

EQUIPMENT SPECIFICATIONS

2.12. Accessories

2.12.1. Power wash down system

- 2.12.1.1. Separate Tank to provide fuel oil for wash down system
- 2.12.1.2. 15 feet long high temperature tar and asphalt hose for wash down with hose reel
- 2.12.1.3. Spray wand for wash down system
- 2.12.1.4. Hose trough for fill hose
- 2.12.1.5. Liquid sampling valve located in rear tank head
- 2.12.1.6. Hand spray attachment
- 2.12.1.7. Hand spray gun with cold handle

2.12.2. Minimum of three (3) nozzles for hand spray gun

2.12.3. Flexible rubber hose for hand spray gun to be a minimum of 25 feet

2.12.4. All liquid asphalt pumped to the tank, from the tank or to the spray bar must pass through a screen

2.12.5. Turn signals at rear of distributor controlled by truck chassis

2.12.6. Distributor to be equipped with lights and reflectors to comply with federal standard requirements

2.12.7. Distributor lights to be sealed L.E.D. type

2.12.8. All required tools shall be supplied with distributor

Comply: ___Yes ___No

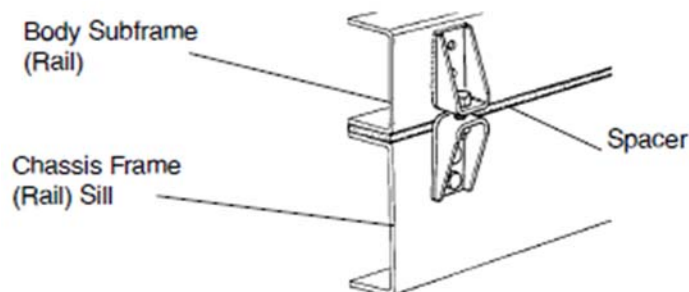
2.13. Body Installation

2.13.1. A sill spacer is not required. A rubber or plastic (Nylon or Delrin) sill spacer may be used between the chassis frame and body subframe. WOOD SPACERS ARE NOT ALLOWED!

2.13.2. Body shall be bolted to frame using brackets or fishplates, similar to below. U-BOLTS ARE NOT ALLOWED!

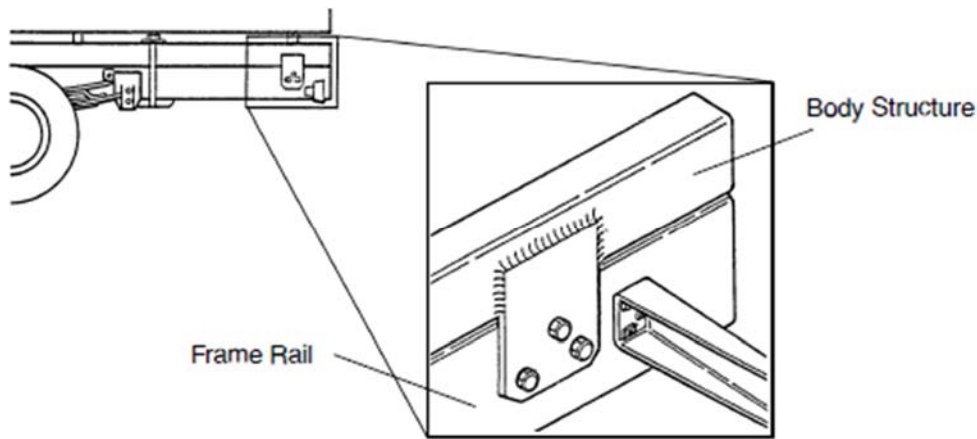
2.13.2.1. Where possible, the upfitter should use existing holes in the chassis frame web.

2.13.2.2. Brackets



2.13.2.3. Fishplates – To be bolted to chassis frame and bolted or welded to body subframe

EQUIPMENT SPECIFICATIONS



Comply: ___ Yes ___ No

2.14. Paint: Distributor steel components shall be finished in manufacturers standard black enamel

Comply: ___ Yes ___ No

3. Safety Lighting

- 3.1.** Truck must be delivered with warning lights installed in accordance with these specifications and the illustrated layout below
- 3.2.** Warning lights shall be installed by an upfitter who is experienced in and regularly engages in the installation of automotive electronics & warning lights. Installer shall use vehicle & lighting manufacturers' guidance along with industry best practices and techniques to ensure that lights are installed in a safe and neat manner
- 3.3.** All wiring and cables should be logically routed, secured, and protected with convoluted loom where possible. Rubber grommets shall be used where wires and cables penetrate any cab panels, body panels, or chassis structure. All cab and body penetrations shall be adequately sealed to prevent water from entering.
- 3.4.** All warning lights must be controlled by a single in-cab, dash-mounted upfitter switch. The switch must be labeled to read "Warning Lights".
- 3.5.** Installer must contact the DOTD Equipment Section prior to programming to confirm intended flash pattern(s).
- 3.6.** Full size Light Bar – Full (60") light bar that satisfies the following requirements, mounted to the cab and not interfering with air horns (see picture below)
 - 3.6.1.** SoundOff Signal nRoads Mid-Size or equal
 - 3.6.2.** Length is nominal and +/- 1" is acceptable.
 - 3.6.3.** Dual color - 12 diodes per module (equal number of green & amber)
 - 3.6.4.** All pods/modules must be capable of fully displaying both colors.
 - 3.6.5.** Flash pattern must be capable of alternating between an asymmetric, low frequency, "wig-wag" pattern and a low-frequency double or quad flash.
 - 3.6.6.** UV resistant clear polycarbonate lens
 - 3.6.7.** 10-16 VDC
 - 3.6.8.** Light bars shall meet all applicable federal/state laws and regulations
 - 3.6.9.** Shall be SAE J845 360-degree Class 1 certified
- 3.7.** Perimeter Lights - Four (4) perimeter lights, front mounted at grill level (see picture below)
 - 3.7.1.** Brooking Industries M16 surface mount perimeter lighthouse or equal

EQUIPMENT SPECIFICATIONS

- 3.7.2. Size: Length: 4.5-5.5 in., Height: 1.0-2.0 in., Depth: 0.3-0.5 in.
- 3.7.3. 12-24 VDC
- 3.7.4. UV resistant clear polycarbonate lens, black bezel trim
- 3.7.5. Sixteen (16) diodes, dual color, equal number of green & amber (interleaved 8x8)
- 3.7.6. Lighthouse must be capable of displaying each color across full length
- 3.7.7. Capable of alternating between an asymmetric, low frequency, "wig-wag" pattern and a low-frequency double or quad flash
- 3.7.8. Lighthouse shall meet all applicable federal/state laws and regulations
- 3.7.9. Shall be SAE J595 Class 1 certified
- 3.8. Two (2) 6" rear facing oval lights mounted in rear. (See picture below)
 - 3.8.1. 6" L x 2¼" W , recessed, grommet, snap-in mount, LED
 - 3.8.2. Polycarbonate lens
 - 3.8.3. Dual color – half-amber, half-green
 - 3.8.4. Must be capable of double or quad flash pattern
 - 3.8.5. 12-24 VDC, with plug-in connector
 - 3.8.6. Shall be SAE J595 Class 2 certified



Comply: ___ Yes ___ No

4. Manuals/Training

- 4.1.1. The supplier shall provide one printed version and one electronic version of the Operators' manual for the truck.
- 4.1.2. The supplier shall provide one printed version and one electronic version of the Operators' manual for the Asphalt Distributor bed.
- 4.1.3. The supplier shall provide one printed version and one electronic version of the parts manual for the Asphalt Distributor bed.
- 4.1.4. Installation shall be completed at the supplier's location. It shall be the responsibility of the supplier to insure that all unit items are properly located and installed.

EQUIPMENT SPECIFICATIONS

Comply: Yes No

5. Warranty

5.1.1. Minimum of 12 months on total unit. Warranty repairs to be made at user location or vendor will make arrangements to pick up and return unit.

Comply: Yes No

BIDDER'S EXCEPTIONS

Instructions: Bidder should note all exceptions in space provided below. List the detail number from the aforementioned specification in the column to the left and the exception in the column to the right. Responses may be typed or hand-written. Handwritten responses must be legible. If additional space is needed, please print a duplicate copy of this sheet. "Bidder's Exceptions" page(s) should be returned with the bid submittal.

Examples:

1.6	Engine has 325 horsepower
1.18.3	Batteries have 2000 CCA combined.
2.2.8	Crossmembers are 4" channel on 12" centers.

**Spec./Detail
Reference**

Exception
