

I. GENERAL TRUCK SPECIFICATIONS:

A. INTENT STATEMENT:

The purpose of these specifications is to describe a 1,000-gallon bituminous distributor trailer for use by the Department to service road construction with bituminous materials. The unit shall consist of a dual axle towed trailer chassis with a minimum 1,000-gallon tank, 14-foot spray bar and radar controller for dispensing road material as described, rated at 65 MPH. Ref. Pavement Technologies International Corp. Model DMT-1000

Pennsylvania Department of General Services, PCID No. 1075, "*General Requirements for Bidding PENNDOT Vehicles/Equipment*", most current version effective at the time and date of bid opening, is included as a part of this specification. PCID No. 1075 may be reviewed and downloaded from the Department of General Services website, <http://www.dgs.state.pa.us>.

Bidders must be an OEM manufacturer, or approved OEM vendor/dealer. Bidders will be responsible to make repairs/adjustments for items not meeting specifications found during inspection after delivery and prior to being accepted.

Delivery as required per Department of General Service PCID NO. 1075 Section "G". All units must be delivered within 130 days after receipt of the purchase order by the successful bidder.

Trailers must be delivered at ground level (stacking is unacceptable).

Trailers shall be delivered with current PA State Inspection Sticker.

Pre-delivery trailer plug and circuit compatibility testing with Department owned trucks shall be performed. (Ref: EQN-80B for guidance).

Warranty per PCID 1075, Section E 1, Construction Equipment – (2 years).

It is understood that the components specified are minimum and if the unit manufacturer's Engineering Department recommends or deems necessary, due to their particular weight distribution, a larger component or a larger GAWR totally, the burden of responsibility is hereby placed upon the Manufacturer's Engineering Department to supply a unit that is totally engineered.

The dynamic and static loads created by the unit, plus operational stresses, must be reviewed to ensure the Commonwealth of a properly designed/engineered unit.

This specification and all specified components must be reviewed and approved by the successful manufacturer. The installation of the specified components must be approved by the successful manufacturer's Engineering Department.

Trailer Components:

FMVSS, NHTSA-compliant trailer mounting on dual axle, L.E.D. rubber mounted lighting, "free backing" surge brakes with emergency breakaway system, standard 7-round pin male connector.

Power cord shall extend 8 feet in length beyond Pintle. There shall be a Cole Hersee No. 11750 stor-a-way trailer connector plug-holder located in the tongue area. All harness pass-through locations shall be protected by a grommet. All wiring shall be protected within a frame-rail, metal enclosure or conduit. Wiring shall not be exposed within a wheel-well. Ref. EQN-80B

3-inch Lunette eye - minimum 5 vertical positions of adjustment (20 inch – 28 inch). Delivered hitch height shall be set at 28 inches from ground to center of eye with trailer level.

Two (2), minimum non-rusting, coil-proof, high tensile safety chains. Each chain shall have a minimum breaking strength rated equal or above the GVWR. Each chain shall extend 3 feet beyond the Pintle eye. Forged steel hooks with safety hasp to fit a minimum 5/8-inch up to and including a 3/4-inch D-ring (from tow vehicle) at the end of chain and the other end of the chain shall be permanently mounted to trailer.

Hydraulic surge brake system properly rated for GVWR. Trailers are to be equipped with surge brakes (unless specified as air brakes) and rely on a mechanical braking system. The use of electrical connections such as solenoids or dump valves and manual lockout devices will not be accepted for trailer backing. The axle brake shoes MUST be "FREE BACKING" type.

OTHER FEATURES: Hi-strength low alloy steel mainframe.

A decal stating, "(MLWR) Trailers actual load carrying capacity is _____" shall be posted on the trailer in minimum 1-inch lettering.

A metal identification tag stating manufacturer's information, model number, serial number and date of build shall be mounted within the tongue area.

All pivot points shall be of the "heavy duty" design and shall incorporate easily accessible zerk fittings. Zerk fitting location/s shall be stenciled on the trailer.

Tank and Distributor Components:

1000-gal capacity trailer mounted distributor:

Product tank minimum capacity: 1,000 gallons

Product tank build: Shell 3/16-inch, heads 1/4-inch, HRS plate.

Beckett burner heating system. Electronically ignited, turbo-powered, diesel burner.

Thermostat for burner control. Digital temp switch.

Closed circuit flush system.

Level indicator and dial thermometer

Single nozzle spray wand with 50 feet x 1/2-inch hose and reel.

Tank and Distributor Components: (continued)

DUO-FLO fully circulating spray bar and platform:

- 14 feet folding spray bar with 8 feet main section and 3 feet folding extensions
- 3/8-inch nozzles with valve every 6-inch
- Operator platform with anti-skid surface, any area designed to walk or climb on including handrails shall be covered with anti-slip paint. Anti-slip tape will not be accepted.

60 GPM Viking pump system upgrade

- Minimum 13 HP Briggs & Stratton, Honda, or Kohler engine
- 2- inch plumbing

Electric start Honda engine | for 60 GPM Viking pump system upgrade

Remote actuator for spray bar | for 60 GPM Viking pump system upgrade:

Electro-pneumatic actuator and remote control for remote operation of spray bar valve computer monitor, Sauer Danfoss DP200, with on/off spray-bar controller, ground radar. Outputs include gallons/min, gallons-applied, ground speed, distance traveled; input length of spray bar; provides real-time monitoring and records the last 10 spray operations and cumulative historical output of spray operations. Includes a 50 feet extension (to reach most truck's cab).

Auxiliary air compressor for remote actuator for spray bar:

Electric air compressor/tank system to power electro-pneumatic actuator

Auxiliary battery package: 12V, 55Ah, 750 Amp CCA, deep cycle battery, 300+ charge cycles

3/4-inch hose reel and wand upgrade

Tank insulation package:

- 2-inch Mineral wool insulation on tank body
- 1-inch Mineral wool insulation on tank ends
- 20-gauge aluminum outer tank skin.

Electric overnight heating:

- Electric overnight heating element. (220V-240V, 1PH, 6kW @ 240V, 3-U-Rod immersion heating element, integrated Thermostat, 60 – 250°F

LED lighting upgrade

LED amber strobe light with steel mount

Spare tire and holder: • ST235/80R16 tire w/166WS865 wheel

There shall be no connections outside of a sealed box, unless connections are soldered and properly sealed with heat shrink. **3M type (Scotch Lock) crimp connectors are unacceptable and will not be accepted.** All electrical connection shall be coated with dielectric grease.

II. DRAWINGS:

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|----------|-------|------|----------|---------|--|
| EQN-80B | dated | Rev. | 05-16-18 | 1 sheet | WIRING DIAGRAM |
| EQN-127A | dated | Rev. | 01-02-09 | 1 sheet | CONSPICUITY TAPE STRIPING REQUIREMENTS |

The above referenced drawings shall become part of these specifications. These drawings reflect the intent of the Department. Any discrepancies shall be resolved at the Pre-build meeting between the vendor and the Fleet Management Division. **DRAWINGS APPEAR AT THE END OF THE SPECIFICATIONS.**

III. MANUALS

The successful vendor shall furnish all applicable manuals per unit:

- 1 Operator's
- 1 Parts
- 1 Service
- 1 Engine
- 1 Transmission (Automatic or Manual)
- 1 Body and Sub-frame (Parts and Service)
- 1 Complete set of manuals for any additional items/equipment added to a piece of equipment.

The manuals listed shall be official O.E.M. publications supplemented with technical manuals for all components as published by sub-vendors/manufacturers.

Parts Manual presented must be a relative to "all" items utilized to build these units, with appropriate part numbers.

Delivery of these manuals shall be completed with the delivery of each unit(s).

Manuals shall be supplied on thumb drives (in PDF format) along with paper manuals.

IV. TRAINING

Mechanic:

The successful vendor shall provide services of qualified factory trained technicians for not more than 0 training sessions of not more than 0 hours at 0 PennDOT locations to train personnel for in-depth preventive maintenance, overhaul and review of the proper usage of parts and service manuals, as well as component/system adjustments that need to be monitored at specified service intervals.

Operator:

The successful vendor shall provide services of qualified factory trained technicians for not more than 0 training sessions of not more than 0 hours at 0 PennDOT locations to train personnel in the proper operation, safety and servicing of the equipment.

The successful vendor shall submit a training plan to the Fleet Management Division for approval within 45 days after receipt of the Purchase Order. The training plan shall consist of course outline and class schedule.

All training must be completed within 60 days after the dates established in the approved training plan unless an extension is mutually agreed to in writing by the Chief of the Fleet Management Division.

All training shall be coordinated with the District Equipment Managers, with the exception of Asphalt related training, which must be coordinated with the Statewide Training Coordinator (717) 787-4836, Fax (717) 783-4438.

V. WARRANTY: Per PCID No. 1075