**Stepp SMT-400P Mini Distributor Tank**

**Bidding Specifications**

**1.0 INTENT**

It is the intent of this specification to provide for the purchase of one (1) new and unused STEPP MINI TANK to be used for the purpose of distributing tack oil or emulsion based materials.

The following specification is based upon a STEPP SMT 400P. The Public Works Department has evaluated different styles of distributor equipment and has determined that this product is best suited for the DPW needs in terms of quality and features. This specification shall not be interpreted as restrictive, but rather as a measure of quality and performance against which all other distributors will be compared.

In comparing proposals, comparison will not be confined to price only. The successful bidder will be the one whose product is judged as best serving the interests of the DPW when price, product, quality, and delivery are considered. The DPW also reserves the right to reject any or all bids or any part thereof, and to waive any minor technicalities. A contract will be awarded to the bidder submitting the lowest responsible bid meeting the requirements.

**2.0 EQUIVALENT PRODUCT**

Bids will be accepted for consideration on any make or model that is equal or superior to the distributor specified herein. Decisions of equivalency will be at the sole interpretation of the DPW. A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence. An original manufacturer’s brochure of the proposed product is to be submitted with the proposal.

**3.0 INTERPRETATIONS**

In order to be fair to all bidders, no oral interpretations will be given to any bidder, as to the meaning of the specification documents or any part thereof. Every request for such a consideration shall be made in writing. Based on such inquiry, the DPW may choose to issue an addendum in accordance with local state laws.

**4.0 GENERAL**

The specification herein states the minimum requirements of the DPW. All bids must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be cause for rejection. The DPW will consider as irregular or non-responsive, any and all bids that are not prepared and submitted in accordance with the bid document and specification, or any bid lacking sufficient technical literature to enable the DPW to make a reasonable determination of compliance to the specification. It shall be the bidder’s responsibility to carefully examine each item of the specification. Failure to offer a completed bid or failure to respond to each section of the technical specification (COMPLY: YES NO) will cause the proposal to be rejected without review as non responsive. All variances, exceptions, and/or deviations shall be fully described in the appropriate section. Deceit in responding to the specification will be cause for rejection.

**5.0 SPECIFICATIONS**

**COMPLY**

|  |  |  |
| --- | --- | --- |
| **TANK:**  Tank to have a capacity of 400 gallons with 5% for material  expansion. | **YES** | **NO** |
| Shall have dimensions of 190”x 73”x 85” and weigh no more than 3500# empty. |  |  |
| Heating tank shall be round in cross section with a 20" fill opening manway with lockable latch and a 3" diameter overflow pipe, to eliminate spillage caused from surging material. |  |  |
| Shall be constructed of 12 gauge A569 steel plate with 10 gauge steel heads. |  |  |
| Tank to be insulated with 2" of high temperature fiberglass insulation  welded to an outside 16 gauge steel cover. |  |  |
| Tank to be electrically welded inside and out. Tank shall be tested for leaks in accordance with N.D.E. (Non-Destructive Examination)  procedures. |  |  |
| Shall have steps to access ladder, leading to manway. |  |  |
| Kettle to be equipped with an inside closing manifold style valve,  6" bottom unloading for complete drainage of tank, and a 2” ball  valve drain. |  |  |
| Shall have one (1) 6" thermometer stem with 2½" face. Temperature shall range from 0° - 550° F inserted in a well with protective collar. Not in specs |  |  |
| **TRAILER:**  Trailer to be A-frame style with axles rated to carry a loaded tank at  highway speed. (1 - 7000# axle w/ 235/80/R16 LR E Tires) |  |  |
| Frame constructed of 2”x 6”x 3/16" high strength, rectangular steel tubing reinforced at all stress points with 1/4”x 6"x 15" fish plates. |  |  |
| Suspension shall be of leaf spring type. |  |  |
| Shall have a one-piece bolt-on shackle. |  |  |
| Shall have electric brakes with break-away kit and tires. |  |  |
| Hitch to be pintle ring, adjustable from 21" to 34", adjustable  screw jack, and 12 gauge heavy duty fenders constructed of bolt-on design and able to support 500 lbs. without damage. |  |  |
| The electrical system shall be 12 volt DC battery with charging system, with 7RV light plug. |  |  |
| Turn signals and brake lights shall be sealed beam grommeted. |  |  |
| Side markers shall be mounted at the rear and sides of unit. |  |  |
| A minimum 5000# capacity tongue jack, with swing away feature for road clearance, shall be installed. |  |  |
| Safety chains shall be grade 40 with attached eye bolts. |  |  |
| All wiring and fuel lines shall be run through the inside frame for protection from outside elements. |  |  |
| **HEATING SYSTEM:**  There will be 1-type 309 stainless steel flue liner in the fire tube to  eliminate hot spots on flue. Not in specs |  |  |
| Shall consist of one (1) flue, constructed of 6" diameter x .188 wall  thickness fire tube, 6" diameter x .135 wall thickness on return tube to a vertical exhaust stack with rain covers. |  |  |
| To be heated with one (1) Stepp MLT-250 self-vaporizing liquid LP burner with an operating output of up to 250,000 BTU. |  |  |
| **LIGHTS:**  Combination stop, turn, and clearance lights with license plate bracket wired in a protective loom with 4 prong connector. |  |  |
| **PAINT:**  Surfaces of the unit will be properly prepared and primed per standard industry practices. Shall have a two (2) part polyurethane paint. |  |  |
| **WARRANTY:**  Shall be one year on parts, materials, and workmanship. Product pumps and hoses that handle heated materials shall have a 12 month pro-rated warranty. Component parts such as engines, hydraulic components, tires, etc., shall be covered by the component manufacturer’s warranty. |  |  |
| **OPTIONAL FEATURES** |  |  |
| **HYDRAULIC SURGE BRAKES IN LIEU OF ELECTRIC:**  To allow for break-away protection by applying brakes in case of accidental break-away from towing vehicle. |  |  |
| **AUTOMATIC TEMPERATURE CONTROLS:**  Automatic spark ignition lights the burner with the flip of a switch and includes flame-out protection to shut off the burner supply if the flame is blown out. |  |  |
| The electronic thermostat shall have an easy-to-adjust thermostat with a setting range from 0-550 degrees F. |  |  |
| Shall include a large digital LED display for easy monitoring of the product in the tank. |  |  |
| Burner operation and temperature controls shall be fully automated with this system. |  |  |
| Shall be located in a weather proof enclosure that shall have a transparent cover so the temperatures can be monitored without the need to open the cover. |  |  |
| The operator shall be able to read the product temperatures when standing 6 feet from the machine. |  |  |
| **HYDRAULIC PUMPING SYSTEM W/ KOHLER LPG ENGINE:**  To include a 20HP Kohler LPG engine with electric start. |  |  |
| A 12 volt battery shall be included and located in a lockable battery box. |  |  |
| The engine shall power a hydraulic pump. The hydraulic pump shall  power a hydraulic motor which will operate a Viking HL-32 material  pump. Pump shall be capable of forward and reverse positions. |  |  |
| To include 15’ of 2 ½” yellow ortec hose and a 5’ steel spray wand  with an on/off valve. |  |  |
| A 3-way valve shall be installed to allow for flushing of pump and  plumbing. |  |  |
| Shall be equipped with a recirculating valve to allow for material to circulate back to the kettle without going through spray wand (to circulate material in tank). |  |  |
| Shall be equipped with 15’ of ½” flexible hose with 5’ hand held spray wand with nozzles and hose rack. |  |  |
| **HYDRAULIC PUMPING SYSTEM W/ TRUCK HYDRAULICS:**  Product pump to be hydraulic motor, powered by truck hydraulic system. Hydraulic motor to have forward/reverse control valve with built-in relief valve. |  |  |
| All hydraulic motors to be run with hydraulic tubing. |  |  |
| To have two (2) connection hoses extending 50” in front of kettle to  attach to truck. Hoses to be ½” diameter x 100R1 high pressure hydraulic hose. |  |  |
| Hydraulic motor drives a Viking HL-32 material pump equipped with  recirculating valve to allow for material to circulate back to kettle  without going through spray wand (to circulate material in tank). |  |  |
| Suction line to have removeable screen 3-way valve between screen  and pump to allow for flushing of pumping system. |  |  |
| **20’ SPRAY WAND AND HOSE:**  Shall have 5’ longer reach than standard 15’ hose and wand. |  |  |
| **25’ SPRAY WAND AND HOSE:**  Shall have a 10’ longer reach than standard 15’ hose and wand. |  |  |
| **FLUSH TANK:**  5 gallon tank constructed of 16 gauge steel. Will be plumbed to flush  out spray wand or spray bar. |  |  |
| **RECIRCULATING FLUSH TANK:**  The flush system is a closed system that recirculates the flush solvent to greatly reduce the amount of hazardous materials requiring disposal. Solvents are circulated back to a 15 gallon flush tank and flow through baffles that allow sediments to settle in the bottom of the flush tank. When the solvents are no longer effective, the flush tank is drained and refilled with fresh solvent. This system significantly reduces the amount hazardous waste generated during flushing procedures. |  |  |
| **APPLICATION NOZZLE WITH SHOE:**  Nozzles available in 1/8”, ¼”, 3/8” sizes. |  |  |
| **DIESEL ENGINE:**  Kubota Model Z602, 2cy, liquid cooled engine in lieu of Kohler LPG. |  |  |
| **HONDA GASOLINE ENGINE:**  Shall be model GX390, air cooled, 4-stroke OHV petrol engine, 25”  inclined cylinder with horizontal shaft. Shall be 11HP with transis-  torized igniter system and recoil electric start system. Shall have an  18 AMP charging circuit. |  |  |
| **DIESEL BURNER:**  Beckett forced air diesel fuel burner with an operating output of up to 420,000 BTU. |  |  |
| The burner shall fire down a single flue constructed of 6” diameter x .188 wall thickness and a 6” diameter x .135 wall thickness on return tube to a vertical exhaust stack. |  |  |
| The burner is completely self-contained with automatic ignition and safety shut off circuitry to stop the fuel flow if the flame goes out. |  |  |
| The burner is designed to operate on 12 volt DC power without the need for additional adaptors or apparatus. |  |  |
| The heating system shall operate on either #1 or #2 diesel fuel. |  |  |
| Fuel to be supplied from a 30 gallon fuel tank. |  |  |
| **DIESEL BURNER ENCLOSURE:**  Lockable enclosure to protect burner from outside elements. Shall be vandal proof. |  |  |
| **ELECTRIC AGITATOR W/ 7 DAY PROGRAMMABLE TIMER:**  Allows for continuous mixing of product to eliminate settlement of  heavier particles to help maintain spec. |  |  |
| **HYDRAULIC DRIVE VERTICAL AGITATOR:**  Vertical agitator is driven off of hydraulic system to help maintain  spec during storage or during application procedures. |  |  |
| **ECONOMY TACK BAR:**  6’ non-circulating spray bar with 12 veejet nozzles on 6” centers. Also available with tether control to activate hydraulics and valve to start and stop pump. |  |  |
| 8’ economy tack bar. |  |  |
| **DELUXE TACK BAR:**  6’ full-circulating spray bar with 12 veejet nozzles on 6” centers. Flip  valve for each nozzles. 20’ tether to operate linear actuator to open/  close valves. |  |  |
| 8’ deluxe tack bar. |  |  |
| **100#LP CYLINDER W/ RACK:**  100# LP bottle with liquid withdrawal and safety collar. |  |  |
| **MOUNTED LP BOTTLE:**  52 gallon LP DOT approved tank with liquid withdrawal and contents  gauge. Mounted to trailer. |  |  |
| **SMV SIGN:**  DOT approved slow moving vehicle sign. |  |  |
| **SPARE TIRE:**  Spare tire with holder mounted to frame of unit. |  |  |
| **WASHDOWN SYSTEM:**  Consists of a 12 volt pump with hand spray wand and 15’ hose to wash tools and interior of hopper. |  |  |
| **HOSE REEL:**  Hose reels for tack hose, washdown hose, and hand torch hose. |  |  |
| **STROBE LIGHT:**  12 volt powered. Controlled from operators control panel. Strobe mounted on the top rear of unit. |  |  |
| **FIRE EXTINGUISHER:**  10 lb. ABC dry chemical fire extinguisher. |  |  |
| **TOOL BOX:**  Constructed of 12 gauge steel with cover and lockable hasp 10”x 10”x 24”. |  |  |
| **ENGINE ENCLOSURE:**  Lockable enclosure to proctect engine from outside elements. Also  vandal proof. |  |  |
| **STAINLESS STEEL TOOL HOLDERS:**  Spring loaded clamps for holding rakes, lutes, brooms, and shovels. |  |  |
| **ELECTRIC OVERNIGHT HEATERS:**  Available to reduce startup time and maintain heated material at temperatures. Provides low temperature heat that will not scorch material. |  |  |
| 110V 1500W |  |  |
| 220V 3000W |  |  |

**Exceptions & Deviations**

Bidder shall fully describe every variance, exception, and/or deviation. List the item number here and fully explain any items in non-compliance with specification. Additional sheets may be used if required.

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