



**SMT**  
**TRAILER EMULSIONS TANK**



Specifications



SMT 400



SMT 600

Available in the following sizes:

250-P, 400, 600, 1000, & 1200 Gallons ~ Propane, or Diesel Heating Systems

12325 River Road, North Branch, MN 55056~ Phone: 651-674-4491~ Fax: 651-674-4221 [www.steppmfg.com](http://www.steppmfg.com)

The Stepp Trailer Mounted Mini Tanker is the perfect blend of

PERFORMANCE, DURABILITY,

and VERSATILITY

for your pothole patching needs and budget!

<b>Quick Spec</b>	<b>SMT 250-P</b>	<b>SMT 400</b>	<b>SMT 600</b>	<b>SMT 1000</b>	<b>SMT 1200</b>
<b>Capacity</b>	250 Gallons	400 Gallons	600 Gallons	1000 Gallons	1200 Gallons
<b>Axle</b>	1-3500#	1-7000#	2-6000#	2 - 7000#	2 - 7000#
<b>Tires</b>	225/75/R15/ LR-D	235/80/R16 LR-E	225/75/R15/ LR-D	235/80/R16 LR-E	235/80/R16 LR-E
<b>GVWR</b>	5,000 LBS.	7,000 LBS.	10,000 LBS.	14,000 LBS.	14,000 LBS.
<b>Empty Weight (avg.)</b>	2,000 LBS.	3,500 LBS.	4,000 LBS.	4,800 LBS	5,500 LBS
<b>Dimensions (avg.)</b>	174" L 76" W 76" T	190" L 73" W 85" T	215" L 100" W 100" T	241" L 88" W 94" T	241" L 88" W 94" T
<b>Diesel Burner BTU</b>	N/A	250,000	250,000	250,000	250,000
<b>LP Burner BTU</b>	250,000	250,000	500,000	500,000	500,000

# DETAILED SPECIFICATIONS

## Models Available

- SMT250-P
- SMT400-P        SMT400-D
- SMT600-P        SMT600-D
- SMT1000-P       SMT1000-D
- SMT1200-P       SMT1200-D

\*Each base unit includes: burner, roll over protection, ladder, electric brakes, and gravity drain.



## Brief Description of Model Features

The SMT "P" series models include a single propane fired burner. The "D" series models include a diesel fired burner. Each Mini Tanker model comes with the option of choosing either a propane or diesel burner, with the exception of the SMT250-P, which is offered with only the propane burner.

## Paint

Surfaces of the unit will be properly prepared and primed per standard industry practices. The machine shall be painted in your choice of High Visibility Safety Orange, Yellow, or Black. Custom colors shall be available upon request. Shall have a two (2) part polyurethane paint.



## Warranty

The warranty shall be one year on parts, materials, and workmanship. Product pumps and hoses that handle heated material have a 12 month pro-rated warranty. Component parts such as engines, hydraulic components, tires, etc., shall be covered by the component manufactures warranties. A complete warranty statement is available upon request.



# DETAILED SPECIFICATIONS



## Tank Construction

Heating tank shall be round in cross section, **with a 20" fill opening with lockable latch and a 3" diameter overflow pipe to eliminate spillage** caused from surging material. Tank is to have a capacity of 250, 400, 600, 1000, or 1200 gallons with 5% for material expansion. Shall be constructed of 12 gauge, A569 steel plate with 10 gauge steel heads. Tank to be electrically welded inside and out. Tank shall be tested for leaks in accordance with N.D.E. (Non-Destructive Examination) procedures. Steps to access ladder included. Tank is to **be insulated with 2" of high temperature fiberglass insulation and have a 16 gauge steel cover. One 6" thermometer stem with 2 1/2" face.** Temperature shall range from 0-550 degrees F. Inserted in a well with a protective collar.



## Tank Drain

Kettle to be equipped with an inside closing **manifold style valve, 6" bottom unloading for complete drainage of tank with a 2" ball valve drain.**



## Lights

Combination stop, turn, and clearance lights with license plate bracket wired in a protective loom with 4 prong connector. Lighting options are as follows: Standard 2 light system or 2 light LED system; 4 light system: 2 separate lights for stop and turn signal, located on the rear on each side of the unit; or 4 light LED system: 2 separate LED lights for stop and turn signal, located on the rear side on each side of the unit.

# DETAILED SPECIFICATIONS

## Trailer

The SMT-250 and 400 models shall have frames constructed of 2"x 5" x11 gauge, SMT-600 and 800 models of 2"x 6"x 3/16", and SMT-1000 and 1200 models of 3"x 8"x 3/16". All trailers to be A-frame style with high strength rectangular steel tubing reinforced at **all stress points with 1/4" x 6" x 15" fish plates**. Open channel shall not be used. 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. Hydraulic surge brakes are also available to allow for break-away protection by applying brakes in case of accidental break-away from towing vehicle, as well as ABS Air Brakes for 1000 and 1200 gallon tanks. Hitch shall be of **3" pintle or 2-5/16" ball style (customer specified) and have adjustable height from 21"-34"**. Fenders shall be heavy duty, minimum 12 gauge steel and be of bolt-on design and able to support 500 lbs without damage. Trailer electrical system shall be 12 volt DC battery with charging system, with 6Pin round or 7Pin RV light plug (customer specified). Turn signals and brake lights shall be sealed beam grommeted. Side markers shall be mounted at the rear and sides of unit. A minimum 5,000 lbs 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. All options for this unit are of bolt-on design for easy installation after unit is delivered.



# DETAILED SPECIFICATIONS— HEATING SYSTEM

## Automatic Temperature Controls (optional)

Automatic spark ignition lights the burner with the flip of a switch and includes flame-out protection to shut off the fuel supply if the flame is blown out. The electronic thermostat has an easy-to-adjust thermostat with a setting range from 0° - 550° F. A large digital LED display makes it easy to monitor the product temperature in the tank. Once the operator sets the desired temperature, burner operation and temperature controls are fully automated with this system. The burner controls and thermostats are to be located in a weather proof enclosure. The enclosure 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.



## Propane Heating System

### Flue Configuration

The 250, 400, and 600 gallon models are equipped with a single flue constructed of 6" diameter x .188" wall thickness fire tube, and a 6" diameter x .135" wall thickness on return tube to a vertical exhaust stack.

The 1000 and 1200 gallon models are equipped with a single flue constructed of 8" diameter x .188" wall thickness fire tube, and a 8" diameter x .135" wall thickness on return tube to a vertical exhaust stack.

### Burner Output

The 250, 400, and 600 gallon tanks are heated with one (1) Stepp MLT-250 self-vaporizing liquid LP burner with an operating output up to 250,000 BTU.

The 1000 and 1200 gallon tanks are heated with one (1) Stepp MLT-500 self-vaporizing liquid LP burner with an operating output up to 500,000 BTU.



## Diesel Heating System

### Diesel Burner

The machine is to be equipped with one (1) Beckett forced air diesel fuel burner with an operating output of up to 420,000 BTU. The burner fires down a single flue constructed of 6" diameter x .188" wall thickness fire tube, 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 is supplied from a 30 gallon fuel tank.



# DETAILED SPECIFICATIONS— PUMPING SYSTEM

Hydraulic Pumping System (using truck hyd)

Product pump to be hydraulic motor, powered **from the truck's hydraulic system**. Hydraulic motor to have a forward/reverse control valve with built in relief valve. All hydraulic lines 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 1/2" diameter x 100R1 high pressure hydraulic hose**. Hydraulic motor driving an HL-32 Viking 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 removable screen 3-way valve between screen and pump to allow for flushing of pumping system.

Hydraulic Pumping System (using Kohler 20HP 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 1/2" yellow ortec hose** and 5' steel spray wand with an on/off valve. A 3-way valve shall be installed to allow for flushing of pump and plumbing. Equipped with recirculating valve to allow for material to circulate back to kettle without going through spray wand (to circulate material in tank). Shall be equipped with 15' of 1/2" flexible hose, with 5' hand held spray wand with nozzles and hose rack.



Options! Options! Options!

# DETAILED SPECIFICATIONS— PUMPING SYSTEM

CONT.

Options! Options! Options!



## 20 FT. Spray Wand Hose

Twenty foot hose offers a 5 foot longer reach than the standard 15 foot spray wand hose.

## 25 FT. Spray Wand Hose

Twenty-five foot hose offers a 10 foot longer reach than the standard 15 foot spray wand hose.



## 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 of hazardous waste generated during flushing procedures.



## Application Nozzle With Shoe

Nozzles available in  $\frac{1}{8}$ ",  $\frac{1}{4}$ ", or  $\frac{3}{8}$ " sizes.



# DETAILED SPECIFICATIONS

## Diesel Engine

Kubota® Z602 2cy, liquid cooled engine in lieu of Kohler LPG. (Available only for sizes larger than 250 gallon)



## Honda Gasoline

Shall be Model GX390, air cooled, 4-stroke OHV petrol engine, **25" inclined cylinder with horizontal shaft.** Shall be 11HP with transistorized igniter system and recoil electric start system. Shall have an 18AMP charging circuit.



## Electric Agitator With 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 up-charge** also available upon request.



## Deluxe Tack Bar

**6' full-circulating spray bar with 12 veejet nozzles on 6" centers. Flip valve for each nozzle. 20' tether to operate linear actuator to open/close valves. 8' deluxe bar up-charge** also available upon request.



Options! Options! Options!



100# LP Cylinder w/ Rack

100# LP bottle with liquid withdrawal and safety collar. These are new bottles so you know your fuel won't be contaminated from those rusty "exchange" bottles often supplied to you from the fuel jobber.



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 onto 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 available for tack hose, washdown hose, and hand torch hose.



Strobe Light

12 volt powered. Controlled from operators control panel. Strobe mounted on top rear of the unit.



Fire Extinguisher

10 lb ABC Dry Chemical fire extinguisher.



Tool Box

Constructed of 12 gauge steel with cover and locking hasp 10" x 10" x 24".



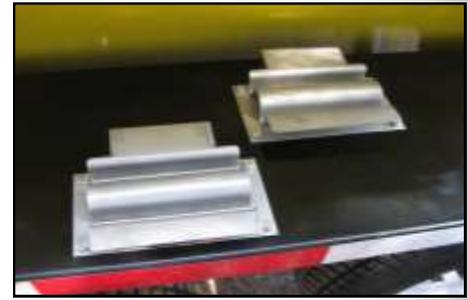
### Engine Enclosure

Lockable enclosure to protect engine from outside elements. Also vandal proof. Available for both Honda and Kohler engines.



### Diesel Burner Enclosure

Lockable enclosure to protect burner 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 start up time and maintain heated material at temperature. Provides low density heat that will not scorch material.

Cold mix use: 110V 1500W Hot mix use: 220V 3000W



Options! Options! Options!

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