

# SPHD

ASPHALT DUMP STYLE HOT BOX



Stepp Dump Style Patching Trailers with  
**INDUSTRY LEADING  
TECHNOLOGIES**

**STEPP MFG**  
ASPHALT MAINTENANCE EQUIPMENT  
651-674-4491 / STEPPMFG.COM



# Industry Leading Pothole Patching Equipment

## Solving Problems, Addressing Needs

At Stepp Manufacturing, our engineers produce equipment that is known in the industry for its durability, reliability and functionality. Since our beginning in 1942, our family owned operation has always produced equipment specific to your needs. We use high quality materials, innovative engineering, and quality personnel to match your needs as they grow.

## Welcome to the Future of Pothole Patching

Stepp Mfg.'s SPHD dump style pothole patcher is the King of Hot Boxes, designed with the end user in mind. The low profile design and dumping capabilities, joined with an oil jacketed heating system, make this the most advanced patching trailer in the world. The Stepp SPHD Dump Trailer is designed with the **GREEN** friendly exhaust that is reused for better burner efficiency, putting the environment first and putting "Green" back into your pocket.

Stepp Mfg.'s dump style pothole patcher is used to heat and reclaim both hot mix and cold mix materials and apply them to roads, parking lots, and bridge decks to repair potholes and utility cuts. The Stepp SPHD dump style pothole patcher is offered with an oil jacketed, diesel fired heating system with a recirculating exhaust system to create a "Green Friendly" heating system. Coupling that with the market's lowest profile, 12,000# hydraulic truck hoist, and gas shock assisted top and rear doors makes this an industry leader that will give you a safe, reliable, and operator friendly machine for years to come.







## *Asphalt Dump Trailer*



- ❶ **Lowest Profile on the Market**
- ❷ **Designed with proper weight distribution in mind “ No Outriggers Needed”**
- ❸ **Oil Jacketed Hopper to Eliminate Hot Spots**
- ❹ **14,000# Electric over Hydraulic Scissor Hoist/Superior Stability**
- ❺ **50° Dump Angle**
- ❻ **Gas Shock Assisted Top Doors and Discharge Doors**
- ❼ **Diesel Burner With Automatic Temperature Controls**
- ❽ **Folding Shoveling Platform to Dump Directly to Roadway**
- ❾ **One-piece Bolt-on Shackles - 250% Stronger than the Competition**
- ❿ **2"x6" Trailer Frame with 100% Bolt-on Components**



# *Industry Leading Pothole Patching Equipment*





# Knowledge-Technology-Innovation and Safety Driven Designs

With over 100 of years of combined industry experiences in our sales, engineering, and production team, we offer what few companies can in our product designs:  
**“WISDOM”**

## Lowest Profile on the Market

The Stepp SPHD boasts the lowest profile on the market. This allows for the operators to safely see the oncoming traffic and allows the driver to see the operator behind the unit. It also allows for a very stable low center of gravity and excellent towing. Available in 2.0 cubic yard (3 ton) capacity and in 3.0 cubic yard (4 ton) capacity.

## 12,000# Scissor Hoist

The SPHD line of hot boxes utilize a 12,000#, electric over hydraulic dump hoist. This is the anchor for a low profile and superior stability.



## 50° Dump Angle

What good is a dump trailer that doesn't dump? With our 12,000# hoist we can dump to 50° ensuring that you are going to get all of the material to the potholes. With the dumping feature this allows for small potholing jobs or large utility cuts—a little or a lot—whatever you need to get the job done. The 50° dump angle also makes clean up at the end of the night a breeze without the need to climb on the unit.

## Oil Jacketed Heating System

The oil jacketed heating system allows for the smoothest most even heating on the market. The oil jacket eliminates hot spots or cold spots in the unit. The oil jacket is the premium heating system and works very well with both hot mix and cold mix materials. The oil jacketed tank extends the life cycle of the hopper and prevents burned out hopper bottoms.



# Engineered Excellence

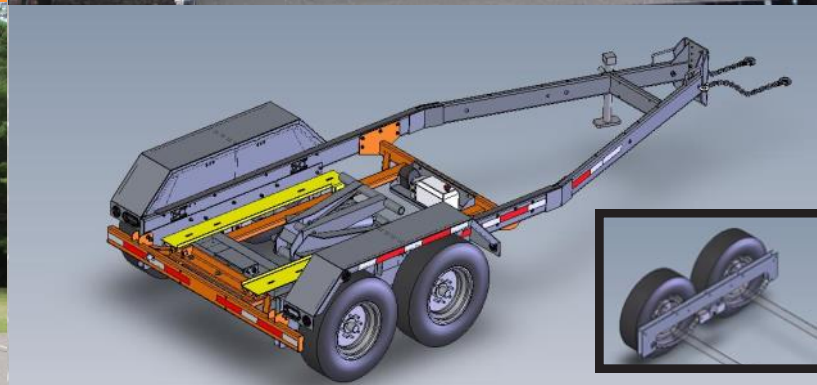
*“Industry leaders with industry leading technologies”*

## Automatic Temperature Controls

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 control are fully automated with this system.

## Diesel Heating with “Green” Friendly Exhaust

The SPHD is fired with a Beckett, forced air diesel fuel burner with an operating output of up to 120,000 BTU. The burner fires under the oil jacket and then is returned into the top of the hopper to reuse or recycle the exhaust heat. This helps prevent the material from bridging and lowers overall cost of operation, putting “Green” in your pocket and being “Green” with less emissions.



## Ultra-Lite Top Doors with Lift Assist

The SPHD offers the ultra-lite top doors with lift assist. Our top doors are constructed of formed **stainless** steel and then are insulated with 2" of high temperature fiberglass insulation. Couple that with our swing lock handles and gas assisted shocks for easy, one-handed opening and we have created the best door system on the market.

## MTF Frame System Shackle Simplicity

The Modular Tubular Frame (MTF) System is truly the foundation of our units. Our MTF frame offers flexibility, maintainability, and extreme reliability. Our bolt-on module system allows for components and options to be bolted on, allowing flexibility in your configuration. The MTF frame also allows us to use our one-piece, bolt-on shackle system, “Shackle Simplicity”. This true tracking shackle system is 250% more heavy duty than anything else on the market. Our MTF frame with “Shackle Simplicity” is just another example of our industry leading technologies and designs.



# Options That Bring Value, Productivity and Safety

## Optional Equipment available on the Stepp SPHD Dump Style Hot Boxes

### 40 Gallon Heated Tack Tank

An optional diesel fired, 40 gallon tack tank keeps your tack oil warm and accessible. Couple that with the optional pumping system with spray wand and you have the ultimate tack system. A hydraulic driven, 20GPM Viking pump, 20' hose and spray wand with retractable hose reel and Honda 13HP electric start engine with charging circuit round out this super option for years of trouble free operation.

### Kubota Diesel Engine

The optional Kubota diesel engine replaces the Honda gasoline engine. The Kubota D602 engine is a liquid cooled, 2 cylinder, 16HP engine with a 50AMP charging system and Deep Sea digital engine management system. This option allows for a single fuel source on your SPHD trailer and offers a lifetime of dependability and reliability. We also offer an optional noise reducing, vandal proof engine enclosure.



### Electric Overnight Heat

We offer two types of electric overnight heaters on the SPHD: 110 volt electric 1500 watt overnight heaters for cold mix and 220 volt 3000 watt overnight heaters for use with cold mix and hot mix. The overnight heater is an option that pays for itself in decreased man hours in just the first few weeks of operation. This is a must have option for crews of all sizes, and just another way Stepp has helped you be more productive and save money.

### Compactor Plate Carrier

The most important thing in making a patch last is compaction. We have made it easy to use the compactor plate with the compactor plate carrier. The carrier not only carries the plate but also has an electric lift and swings onto the middle of the unit for transportation.



# Options That Bring Value, Productivity and Safety

## Optional Equipment available on the Stepp SPHD Dump Style Hot Boxes

### Shovel Cleaning Compartment

*A must have option! Keeps your shovels clean and handy for the task at hand. Includes a bottom baffle to keep your shovels out of the muck, drain plug for cleaning it out and accommodates up to four shovels.*



### Washdown System

*The washdown system includes a 5 gallon solvent tank, electric pump, 20' of hose and a spray wand. The washdown system is used to spray the hopper and tools with release agent to prevent the asphalt from sticking and building up to make clean up a breeze. An optional hose reel is also available. The washdown system also has a burner interlock that prevents the burner from firing when in operation.*



### Front Platform with Railing

*The optional platform with railing makes easy work with clean up. The platform is constructed of grip strut, non-slip steel for safe and easy cleaning. Not available with optional tack tank system.*



### Arrowboard with Swing Mount

*The arrowboard is mounted on the front of the hopper and has amber LED lights and selectable direction controls. The swing mount makes sure that clear visibility is top priority even when the box is in the up position.*



# Options That Bring Value, Productivity and Safety

## Optional Equipment available on the Stepp SPHD Dump Style Hot Boxes

### Strobe Lights

*We offer two different strobe light systems: top mounted beacon or top flush mounted LED flashers. Both are mounted on the top of covers to protect them when loading the hopper. Have a specific strobe light that you want? Let us know and we can accommodate you.*

### Stainless Steel Tool Holders

*The all stainless steel spring clamps will hold anything with a handle. Mounted either on the fenders or on the optional front platform, this is a must have option to carry lutes, brooms, shovels and tampers.*



### Battery Charger

*We didn't just put a charger on our trailer, we put the right charger on it. A dual bank, 20AMP marine grade charger with float mode. The float mode is what makes this a must have option. The float mode allows you to run the burner system overnight and keep the amps flowing but will prevent the batteries from overcharging. Mounted in the battery box for ultimate protection.*

### LP Hand Torch

*The LP hand torch includes a 20# LP bottle, bottle rack with strap, pressure regulator and hand torch. The LP torch helps heat up tools and dry out wet potholes. An optional hose reel is also available.*



# Options That Bring Value, Productivity and Safety

## Optional Equipment available on the Stepp SPHD Dump Style Hot Boxes

### Hook Mounted

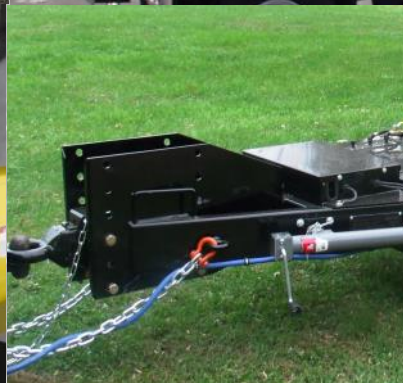
Hook mount your SPHD to take advantage of fleet utilization without tying up your truck when you aren't patching.

### Truck Mounted

The SPHD hopper was designed to also be chassis mounted. Very suitable for mid-sized trucks to make your patching more maneuverable. Includes hoist and sub frame.

### Slip-in Style

Utilize your existing fleet of trucks with the slip-in configuration. Slides into the back of your mid-sized dump truck. Includes an adjustable shoveling platform and adjustable tailgate latch bar.



### Hydraulic Discharge and Top Doors

Hydraulically operated rear discharge and top loading doors make for easy operation. A conveniently located tether operates the hopper lift, top doors and discharge doors.

### Other Optional Equipment

Fire Extinguisher	Tool Box	SMV Sign
Spare Tire with Holder	Water Tank	Burner Enclosure
Burner Repair Kit	LED Taillights	Hydraulic Brakes



## SPHD 2.0

## SPHD 3.0

<b>Shipping Weight</b>	4500#	5900#
<b>GVWR</b>	10,320#	14,000#
<b>Length x Width x Height</b>	208"x90"x87"	225"x90"x90"
<b>Material Capacity</b>	2 Cubic Yards 3 ton	3 Cubic Yards 4 Ton
<b>Fuel Tank Capacity</b>	30 Gallons	30 Gallons
<b>Hydraulic Tank Capacity</b>	2.2 Gallons	2.2 Gallons
<b>Dumping Angle</b>	52°	52°
<b>Hoist Type and Capacity</b>	12,000 # Truck Style Scissor Hoist	12,000 # Truck Style Scissor Hoist
<b>Hopper Construction</b>	10ga Tank 12ga Oil Jacket 12ga Insulation	10ga Tank 12ga Oil Jacket 12ga Insulation
<b>Heat Transfer Oil</b>	ISO 460 with a COC flash point of 550° F	ISO 460 with a COC flash point of 550° F
<b>HTO Capacity</b>	50 Gallons	50 Gallons
<b>Controls</b>	LED Automatic Temperature Controls	LED Automatic Temperature Controls
<b>Burner Type and Output</b>	Diesel 120,000 BTU	Diesel 120,000 BTU
<b>Hydraulic Pump</b>	Electric Over Hydraulic	Electric Over Hydraulic
<b>Hitch Height</b>	Adjustable 24"-32"	Adjustable 24"-32"
<b>Frame Construction</b>	2'x6"x 3/16" Rectangular Steel Tubing	2'x6"x 3/16" Rectangular Steel Tub-
<b>Axles</b>	Tandem 6,000#	Tandem 7,000#
<b>Tires</b>	(4) 235/85R16	(4) 235/85R16
<b>Brakes</b>	Electric, (Hyd Optional)	Electric, (Hyd Optional)
<b>Hitch</b>	3" Pintle or 2-5/16" Ball	3" Pintle or 2-5/16" Ball
<b>Optional Engines</b>	Honda 13HP Gasoline or Kubota 16hp Liquid Cooled Diesel	Honda 13HP Gasoline or Kubota 16 hp Liquid Cooled Diesel
<b>Optional Tack Tank Size</b>	40 gallon	40 Gallon
<b>Optional Spray Tack System</b>	Hydraulic Drive 20 GPM Pump with Hand Wand and 20' Hose With Hose Reel	Hydraulic Drive 20 GPM Pump with Hand Wand and 20' Hose With Hose Reel
<b>Optional Battery Charger</b>	Dual Bank 20 Amp Marine Grade With Float System	Dual Bank 20 Amp Marine Grade With Float System





## **Stepp Mfg has the Largest Line of Asphalt Patching Equipment in the Industry**



**SPH Hot Boxes & Reclaimers**



**STPH Asphalt Patch Trucks**



**SPHOJ Oil Jacketed Auger Hot Box**



**SSPH Slip In Style Asphalt Hot Boxes**



**SMP Mastic Patchers**



**SMMT Asphalt Recyclers**

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