



Stepp Patch Trucks

Bringing Patching to a New Level

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 it's 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 material, innovative engineering, and quality personnel to match your needs as they grow.

#### Welcome to the Future of Pothole Patching.

Stepp's STPH asphalt pothole patch truck's are the perfect blend of durability, reliability, and operator simplicity. The STPH takes charge of our demanding road maintenance needs. Optional onboard tack tank system, compactor plate carrier, spoils bin, hydraulic jackhammer and air blow out options make this the ultimate patching body. The oil jacketed diesel heating system ensures good quality along with efficiency by evenly heating patch materials. Couple that with the auger delivery system and the 270° full opening hydraulically operated top doors, and you have the ultimate pothole patching machine.

Stepp Mfg's STPH asphalt pothole patching truck 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 pothole and utility cuts. The Stepp STPH asphalt pothole patching truck is offered with an oil jacketed, diesel fired heating system with a recirculating exhaust system to create a "Green Friendly" heating system.







- Available in 4 yd.<sup>3</sup> (5.4 tons) 5 yd.<sup>3</sup> (6.75tons) 6 yd.<sup>3</sup> (8.1 tons) 7 yd.<sup>3</sup> (9.4 tons)
- 2 Available in Chassis Mount or Hook Mounted
- 3 Industry-leading Full Circulating Oil Jacketed Hopper to Eliminate Hot Spots
- **4** 6" AR 400 Auger, 3/8 Solid Fighting 2 Speed Discharge
- 5 270° Full Opening Top Doors
- 6 Triple Wall Construction
- Diesel Burner With Automatic Temperature Controls
- 8 Folding Shoveling Platform or Swing Chute for Direct Road Placement
- 9 Force America Load sensing Hydraulic System With Syncro Mesh PTO
- **©** Center Heated Baffles and "Green Friendly" Recirculated Exhaust System

# Knowledge-Technology-Innovation-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"

#### **Biggest Product Offering in the Market**

The Stepp STPH offers the largest selection of sizes and configurations in the market. Available in 4 cubic yard (5.4 ton) 5 cubic yard (6.75 ton) 6 cubic yard (8.1 ton) and 7 cubic yard (9.4 ton). No matter how big or small your needs, we have the right sized unit for you.

#### **Chassis Mounted Asphalt Patch Truck**

The Stepp STPH asphalt pothole patching truck comes standard as a chassis mounted unit. The chassis mounted unit comes completely installed on your customer supplied chassis or let us know what kind of chassis you want and we can supply you with the completed unit.







#### **Hook Mounted Patch Truck**

Stepp's STPH hook style patch bodies have all the great features of the chassis mounted units with the versatility of the hook lift system. With the rising cost of trucks, the hook lift system allows you to utilize your fleet for demands other than patching. The STPH hook style patch truck can be set up to accommodate any brand of hook lift system. Just another way Stepp has brought innovation to the patching industry.

## Maneuverability

Our patch trucks are the most compact patch trucks on the market. This gives you superior maneuverability when your in the field patching. Stepp Manufacturing gives you the performance you expect in a larger rig. Our expertise and engineering puts that performance in a compact, efficient and maneuverable package. We design and produce top-quality equipment that can easily maneuver around your cul-de-sacs as well as rigs for the open road.

# **Engineered Excellence**

# "Industry Leaders with Industry Leading Technologies"

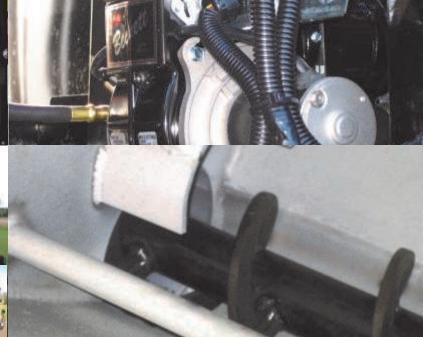
#### **Automatic Temperature Controls**

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 is fully automated with this system.

#### Diesel Heating With "Green" Friendly Exhaust

The STPH is fired with a Beckett forced air diesel fuel burner with an operating output of up to 490,000 BTU. The burner fires down a single flue 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. Unit also available in LP fired.





#### **Full Opening Hydraulically Operated Doors**

The STPH patch body hydraulically operated top doors have a full 270° rotation to fully open. We accomplish this with our hydraulically driven gear boxes. By allowing our doors to completely open and rest along the sides of the hopper we never have issues getting into the tightest of hot mix plants. Our top doors are constructed of formed steel and then are filled with a 2# density polyurethane spray foam. The spray foam give us superior insulating qualities, zero moisture retention, and also gives us strength without weight. With insulating qualities of R9 per inch, our doors do what they are supposed to, keep the heat in.

#### **Auger Delivery System**

The Stepp STPH asphalt patch body comes standard with a 6 inch by 3/8" thick, (abrasion resistant) AR 400 auger discharge system. The material is discharged onto a shoveling platform or the optional swing chute. The standard shoveling platform also folds up to allow you to discharge material directly onto the ground. The auger is powered by a two speed, direct coupled hydraulic motor.

# Engineered Excellence

# "Industry Leaders with Industry Leading Technologies"

#### **Load Sensing Hydraulic System**

The STPH patch truck is equipped with a load sensing hydraulic system from Force America. The hydraulic system consists of a synchro mesh PTO, variable displacement, piston pump. All of the hydraulic functions are controlled by the Force America add-a-fold valve. The valve, hydraulic cooler, tank, and filter are conveniently mounted in a combination enclosure on the frame of the truck. The load sensing hydraulic system gives you tremendous flexibility in your hydraulically controlled functions on the unit. The top doors, auger, hot oil circulating pump, tack tank pump, air blowout systems, and compactor plate carrier are all hydraulically operated.

#### 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 and 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. This premium oil jacketed heating system offers a full circulating hydraulically driven circulating pump and two oil jacketed center baffles.







#### **Shoveling Platform**

Our patch truck comes standard with a wide shoveling platform. The shoveling platform is also designed to fold up and dispense material directly into the roadway. This is extremely handy when you are patching large patches or large utility cuts.

## **Trailer Mounted Systems**

Stepp also offers the STPH line of patch bodies in a trailer mounted configuration. The trailer mounted systems include its own Kubota diesel engine to power the hydraulic system. The trailer mounted systems offer a heavy duty 3"x8" steel rectangular tubing frame and heavy duty ABS brake system. Choose from the 4 yd.3, 5 yd.3, 6 yd.3, or 7 yd.3, configuration to best suit your needs.

## Optional Equipment available on the Stepp STPH Asphalt Patch Trucks

#### **80 Gallon Heated Tack Tank**

Our 80 gallon tack tank is one of the most popular options available on the patch truck. Our tack tank features a thermostatically controlled, oil jacketed heating system heated by a coil in the bottom of the tank. Our tack tank is also configured to be able to recirculate oil back to tank through the wand keeping your wand warm and ready to go. Also Includes a large cleanout sump.

#### **Pumping System with Spray Wand**

Our optional pumping system is powered by a hydraulically driven FH-32 Viking positive displacement pump. The unit includes a 4 foot spray wand, 15 foot 1/2 inch hose, and a veejet spray nozzle. The wand is stored conveniently in the recirculating flange in the top of the tank. This allows you to recirculate your oil back to the tank and keep your hose and wand warm and ready to patch the next hole. Don't forget to add the optional hose reel!



#### **Hopper Access Walkways**

This is a must-have option for safely cleaning out your unit at the end of the night. This option includes 4 foldout walkways that allow you to walk down the fenders of the unit safely, cleaning the remainder of the material of the hopper. The walkways include raised grip tread and a nonskid surface. All of the units come standard with rear built-in steps with handles to safely access the walkways.

#### **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 compactor plate carrier is hydraulically operated and includes a spring lock. The carrier will also fold up out of the way when not in use and includes places to strap your compactor plate down. Optional compactor plate hold downs are also available.

# Optional Equipment available on the Stepp STPH Asphalt Patch Trucks

#### **Air Blow Out Options**

We offer three different air blowing options on the STPH patch trucks. The first is the air blast system. This includes auxiliary air tanks and uses the trucks air compressor to provide a short blast of air clean the potholes. The second is the reciprocating air compressor. This is hydraulically driven and produces up to 25 CFM. The third is a rotary screw air compressor. This compressor is capable of producing 100 CFM allowing you to use air tools such as jackhammers.

#### **Wash Down 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. Don't forget to add the optional hose reel.



## **Shovel Cleaning Compartment**

This is a must-have option. The shovel cleaning compartment consists of a 12 gauge metal tank with splash guard, drain plug, and top cover. The top cover has slots to allow your shovel handles come through them. Will hold up to four shovels.

## **Arrowboard and Arrowstrip**

We offer two different types of arrowboards. The simple LED arrow strip directs traffic in the direction you want. Or the larger Whelen full LED arrow shaped arrowboard keep your operator safe from oncoming traffic. This is a highly recommended option for operator safety and visibility.

## Optional Equipment available on the Stepp STPH Asphalt Patch Trucks

#### **Strobe Lights Systems**

We offer two different strobe light systems. Flush mounted LED strobes are located above the rear taillights and shall be grommet style.

#### Whelen Super LED light system

This system shall consist of two mirror mounted LED strobe lights, 2 Amber rear mounted LED strobe lights, 2 LED backup light, 2 LED stop tail turn lights. Premium light system for superior visibility. Shown Below.

#### **Stainless Steel Tool Holders**

The all stainless steel spring clamps will hold anything with a handle. Mounted on the back of the shovel cleaning compartment for convenient access. This is a must have option to carry lutes, brooms, shovels and tampers.



#### **Spoils Bin**

The spoils bin is conveniently located on the curb side of the truck. It is constructed of 10gauge steel with a bottom trapdoor. It will have a capacity of 6 ft.<sup>3</sup>.

#### **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. Optional hose reel is also available.

# Optional Equipment available on the Stepp STPH Asphalt Patch Trucks

#### **Electric Overnight Heat**

The electrical burning heaters allow for faster startup and maintains heat overnight. The hopper will have to 3000 W 220 V operated by the same thermostat is the diesel burner. The tack tank will have 1-1500 watt heating element wired to the same thermostat as the tack tank. Will include a 15' cord with plug in. 220Volt 30 amp service required.

#### **Water Tank**

15 Gallon Poly water tank with hose and valve to aid in the filling of plate compactor or small rollers. Conveniently located for easy filling and includes large fill cap.



#### **Anti Bridging Mixer**

The anti-bridging mixer is hydraulically driving to swing back and forth to eliminate bridging and tunneling. Especially useful if using a lot of fine grade or oil rich materials. Operated from the operators control panel located on the rear of the machine.

#### Hydraulic Power Beyond and Hydraulic Jackhammer, and Dual Hose Reel

The Power Beyond powers any type of hydraulic tool such as a jackhammer, tamper or most any of the Stanley family of Hydraulic tools. The popular jackhammer option comes in a 35 to 90# class with the most popular being the 70# BR67. Many different types of points and cutters available. Don't forget the dual hydraulic hose reel to compliment the hydraulic tools.

	STPH 4.0	STPH 5.0	STPH 6.0	STPH 7.0
Capacity	4.0 Cubic yd/ 5.4 Ton	5.0 Cubic yd/ 6.75 Ton	6.0 Cubic yd/ 8.1 ton	7.0 Cubic yd/ 9.45 Ton
Hopper Weight (approx.)	6400#	7700#	9300#	10500#
Length x Width x Height	145"L x 96"W x 65"H	160"L x 96"W x 68"H	187"L x 96"W x 61"H	198"L x 96"W x 65"H
Recommended Truck Size	Single Axle 35,000 GVWR 95" Cab to Axle	Tandem Axle 52,000 GVWR	Tandem Axle 52,000 GVWR	Tandem Axle 52,000 GVWR
Hopper Construction	10 Gauge Tank, 10 Gauge Oil Jacket, 16 Gauge Insulation Jacket	10 Gauge Tank, 10 Gauge Oil Jacket, 16 Gauge Insulation Jacket	10 Gauge Tank, 10 Gauge Oil Jacket, 16 Gauge Insulation Jacket	10 Gauge Tank, 10 Gauge Oil Jacket, 16 Gauge Insulation Jack et
Controls	LED Automatic Temperature Controls	LED Automatic Temperature Controls	LED Automatic Temperature Controls	LED Automatic Temperature Controls
Burner Type and Out- put	Diesel Or LP 240,000 BTU			
Temperature Range	0-550 degrees F	0-550 degrees F	0-550 degrees F	0-550 degrees F
Heat Transfer Oil Ca- pacity	185 Gallons	225 Gallons	260 Gallons	290 Gallons
Hyd <mark>raulic Tank Capac-</mark> ity	30 Gallons	30 Gallons	30 Gallons	30 Gallons
Heat Transfer Oil	185 Gallons ISO VG 68 with 498°F Flash Point	225 Gallons ISO VG 68 with 498°F Flash Point	260 Gallons ISO VG 68 with 498°F Flash Point	290 Gallons ISO VG 68 with 498°F Flash Point
Hydraulic Pump	Axial piston pressure and flow compensated load-sensing. 5.61 Cu- bic inch, 23.7 GPM@1000 RPM Operating Pressure 2800 PSI	Axial piston pressure and flow compensated load-sensing. 5.61 Cu- bic inch, 23.7 GPM@1000 RPM Operating Pressure 2800 PSI	Axial piston pressure and flow compensated load-sensing. 5.61 Cu- bic inch, 23.7 GPM@1000 RPM Operating Pressure 2800 PSI	Axial piston pressure and flow compensated load-sensing. 5.61 Cu- bic inch, 23.7 GPM@1000 RPM Operating Pressure 2800 PSI
Hydraulic Valve	Force America Add-A- Fold Electric over Hyd			
РТО	OMFB series constant mesh Transmission Mounted	OMFB series constant mesh Transmission Mounted	OMFB series constant mesh Transmission Mounted	OMFB series constant mesh Transmission Mounted
Auger Size	6'x 3/8" AR400	6'x 3/8" AR400	6'x 3/8" AR400	6'x 3/8" AR400
Auger Drive	2 Speed Hydraulic Direct Drive	2 Speed Hydraulic Di- rect Drive	2 Speed Hydraulic Di- rect with 3.6:1 plane- tary gear reduction	2 Speed Hydraulic Di- rect with 3.6:1 plane- tary gear reduction
Top Doors	Hyd Gear Box for Full Opening. Insulated with Polyurethane Spray Foam	Hyd Gear Box for Full Opening. Insulated with Polyurethane Spray Foam	Hyd Gear Box for Full Opening. Insulated with Polyurethane Spray Foam	Hyd Gear Box for Full Opening. Insulated with Polyurethane Spray Foam
Optional Tack Tank Size	80 Gallon	80 Gallon	80 Gallon	80 Gallon
Optional Tack Pump GPM	Viking FH32 10 GPM			
Optional Overnight Heaters	220VAC 3kW Hopper 220VAC 1.5kW Tack			



# Stepp Mfg Has the largest line of Asphalt Patching Equipment in the Industry



SPH Hot Boxes & Reclaimers

SPHD Dump Style Hox Box

SPHOJ Oil Jacketed Auger Hot Box

SSPH Slip In Style Asphalt Hot Boxes

SRM Asphalt Recyclers

SMM Tailgate Asphalt Recyclers

Stepp Manufacturing Co., Inc. 12325 River Rd North Branch, MN 55056 651-674-4491

Visit Us on the Web! steppmfg.com ~ facebook.com/steppmfg