

SMP **MASTIC PATCHER**

Changing the way the game is played!



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

***Stepp SMP 400 Mastic Machine
with Double Knuckle Placing Augers***

Industry Leading Mastic Technology

Solving Problems, Addressing Needs

At Stepp Mfg, 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 Mastic Patching

Stepp Manufacturing has always been a leader in technology in the asphalt maintenance industry. Safety, Technology , Innovation and Productivity have driven the design for our SMP mastic patcher.

The Stepp Mfg Mastic Patcher is used to melt mastic and apply it to roads, parking lots, and bridge decks to repair and seal cracks, potholes, and distressed asphalts. The Stepp Mfg. SMP mastic patchers are offered with 3 options for dispensing material, standard auger with hydraulic knife gate, oil jacketed swing chute or the double knuckle placing augers. Our Stepp Mfg. SMP mastic patcher is trailer mounted and completely self-contained, meaning it is capable of heating, melting, and applying all grades of mastic materials. Our mastic patchers are designed for quick heat up times and are very simple to use and operate.





- ① **250 or 400 Gallon Tank Options**
- ② **Diesel Fired Options**
- ③ **Digital Thermostat Controls with High Temp (600°) heat transfer oil**
- ④ **Auger Discharge with Hydraulic Knife Gate**
- ⑤ **Kubota Diesel Engine**
- ⑥ **Optional Double Knuckle Placing Auger**
- ⑦ **Full Circulating Heat Transfer Pump**
- ⑧ **Bull Dozer Loading Chute– Smoke Free Loading**
- ⑨ **One-piece Bolt-on Shackles - 250% Stronger than the Competition**
- ⑩ **Direct Shaft Drive Mixer with Planetary Gearbox**

400 Gallon SMP



250 Gallon SMP



Melt Faster, Apply Safer and Easier

“Industry Leaders with Industry Leading Technology”

Stepp Digital Controls

The SMP has digital controls to operate the heating system. Monitor both the material and oil temperature to ensure that you have smooth flowing hot material at the ready. The timer operates the standard tool heater to keep your tools super hot and clean.

Full Sweep Mixer with Hardened Replaceable Paddles and Discharge Auger with Hydraulic Gate Valve.

Offset, opposing mixer paddles ensure uniform mixing when in the forward mode. The angled offset acts as an auger when put into reverse pushing the material back to the rear auger discharge. Just another example of engineering excellence with industry leading innovation. Tank mounted auger ensures you get the material to the repair, eliminating the need for a tank scraper. Hydraulic knife gate allows material to flow easily, without the need for a hand torch to thaw the valve.



Direct Drive Hydraulic Driven Planetary Gear Box

The mastic mixer is driven hydraulically with a direct drive planetary gear box. The planetary gear box is direct coupled with a solid shaft to the mixer to ensure years of trouble free service. No chain couplers to fail! Solid shaft direct connection from the planetary gear box is the industry's most heavy duty built.

Diesel Fired Tool Heater

The diesel fired tool heater is designed to fit your hand tools and smoothing irons. Built with a removable stainless steel bottom for easy cleaning, the tool heater is controlled by a timer operated switch in the control box. Top cover flips open for easy access. The diesel tool heater is standard equipment on all Stepp SMP mastic patchers.

Knowledge-Technology-Innovation and Safety Driven Designs

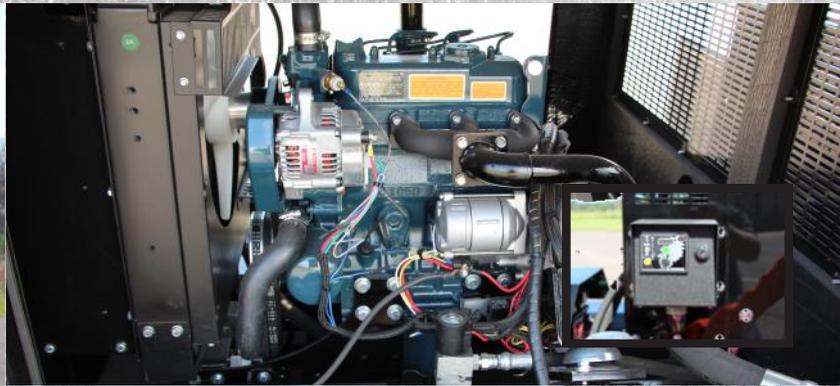
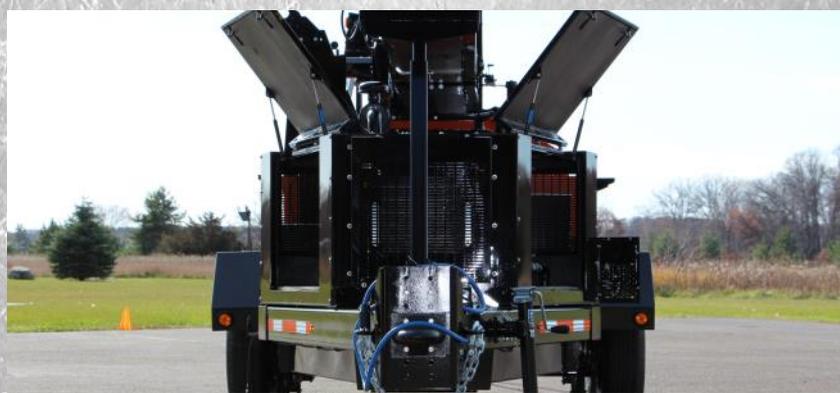
Standard Equipment Available on the Stepp SMP Mastic Machine

Engine Enclosure

The batwing engine enclosure ensures weather protection, noise abatement, and includes vandal proof locks. Equipped with gas operated shocks to keep the large doors open for easy-to-access service points, the engine enclosure also has quick access points located on top of the enclosure for easy filling of oil and antifreeze.

Kubota® Powered

Having a quality machine means having quality components, and our engine is no exception. The liquid cooled, three cylinder, 25HP, Kubota D1105 is what powers our workhorse crack sealers. It uses a direct coupled, load sensing, hydraulic pump. The new Deep Sea digital engine management system, batwing engine enclosure, and anti-vibration engine mounts make this a quiet, trouble-free power plant. (Tier 4 F Compliant)



Smoke Free Operation

The Stepp SMP design minimizes the operators exposure to smoke inhalation. Independent test results show that the Stepp SMP is substantially under the acceptable levels, while the competition was substantially over the acceptable levels. We accomplish this with the heated hydraulic gate valves (that do not require a torch to thaw out), smoke door on the bulldozer loading chute, and quality top covers that seal up the kettle. The picture above is at full operating temperature. (400°)

Bull Dozer Loading Chute

The hydraulically driven loading chute can load 2-3 blocks at one time. The chute has a self closing smoke door to prevent excessive smoke from escaping the machine. The Bull Dozer chute is operated safely from the front engine cabinet or wireless controller.

Options That Bring Value, Productivity and Safety

“Game Changing Technologies”

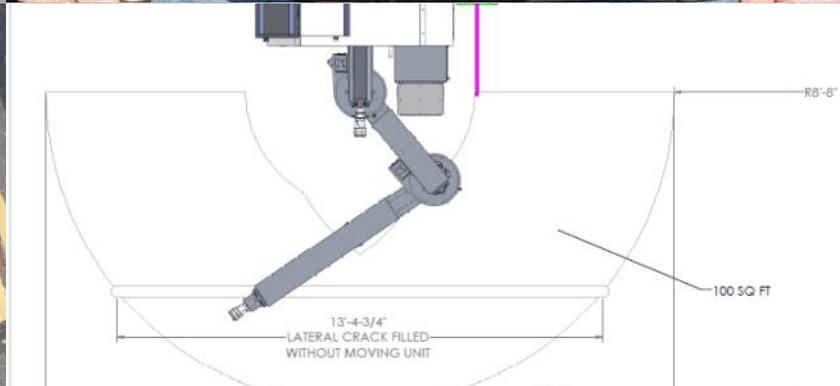
The only adjustable placing auger in the industry.

Oil Jacketed Double Knuckle Placing Augers

The “Game Changer” placing auger system. This system allows for placing material directly into the patch location. Dual hydraulic worm gear swivels allow the oil jacketed heated augers to pivot and swivel to place material anywhere on the road from the center line to shoulder. This allows the operator to maintain the temperature of the material right to the repair area.

Wireless Control For Double Knuckle Placing Augers

Wearable wireless control is used to operate the auger delivery system. The controller allows you to operate the swing of each auger independently, open both the tank gate and the auger gate and control the speed of the augers to control flow rate of the mastic material. Up to 40 hrs. of run time on a single charge and also includes tether if you forget to charge it you can still operate the machine while charging.



Oil Jacketed Double Knuckle Placing Augers

Easily applicate material across the entire lane. Stepp gives the only solution to applicate material without pouring into carts or pails. Increasing safely and productivity exponentially.

Utilizes 2 hydraulic gates to control the flow of the material. One on the main tank (standard on base unit) and the second one is at the end of the placing auger to start and stop the flow right at the patch.

Oil Jacketed Double Knuckle Placing Augers

The placing auger allows a 17' Working area and can fill a 13' 4" lateral crack without moving the machine. Stepp is the only company to offer a solution to applicate material and we give you the full movement to applicate across the entire lane.

Options That Bring Value, Productivity and Safety

Optional Equipment available on the Stepp OJK-H Crack Sealers

Strobe Lights -Wireless Camera with Microphone

LED Beacon light offer full 360 degree visibility. Mounted on the top rear of the machine.

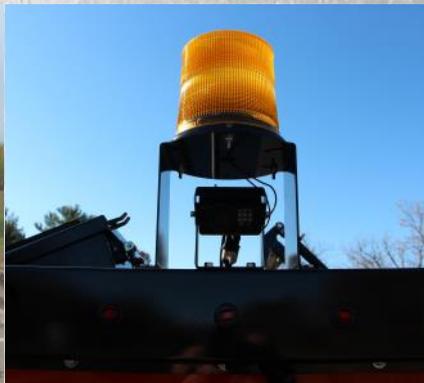
Dual led flush mount strobe lights mounted in the rear of the unit.

Offered with one or the other or both beacon and flush mounted.

Optional wireless camera with color monitor and microphone allows the operator to communicate with the driver.

Air Compressor

A VMC Packsmart V90XCG 100CFM@100PSI rotary screw air compressor may also be installed onto the unit to aid in the cleaning of debris from the roadway. Our compressor is the REAL DEAL. A Kubota D1803 diesel engine rated at 49.6 HP@2600RPM Tier 4 compliant and includes an intake valve, oil cooler, hi-temp shutdown, oil filter, minimum pressure valve, separator head, pressure gauge, and shuttle valve to maintain constant engine speeds.



Electric Overnight Heat

Dual 110 volt electric overnight heaters help speed up the heating time when you arrive on the jobsite first thing in the morning. It is an option that pays for itself in decreased man hours in just the first week 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.

Oil Jacket Heated Swing Chute

Bearing mounted Swing Chute gives you a less expensive option to dispense material. Oil jacketed heat keeps the material flowing. Swings a full 180°. Optional chute scraper is also available.

Drag Boxes and Hand Tools

Adjustable Drag Box Sizes Fits
Swing Chute and Double Knuckle
Placing Augers

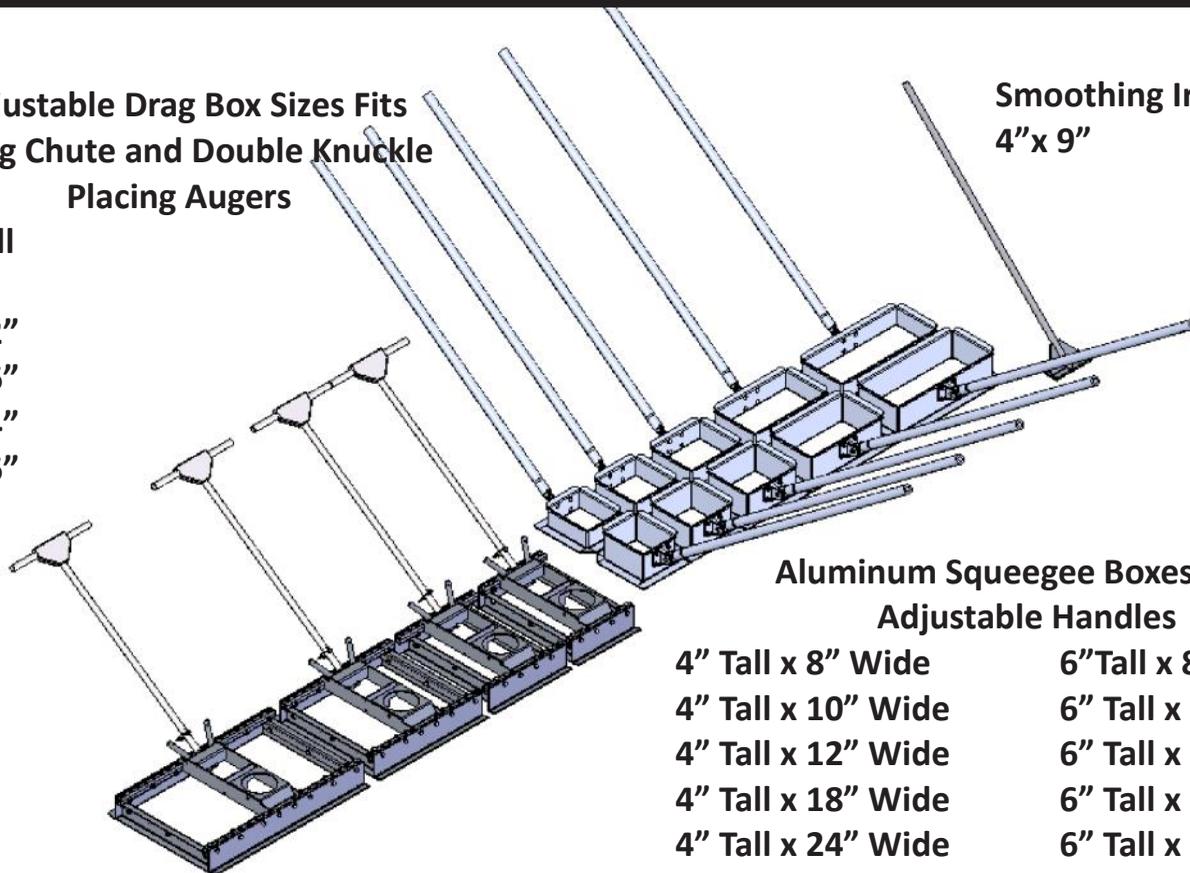
5" Tall

6"-12"

6"-16"

6"-24"

6"-36"



Smoothing Iron
4" x 9"

Aluminum Squeegee Boxes With
Adjustable Handles

4" Tall x 8" Wide

4" Tall x 10" Wide

4" Tall x 12" Wide

4" Tall x 18" Wide

4" Tall x 24" Wide

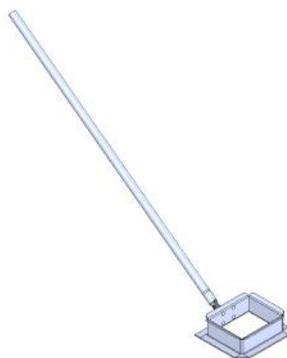
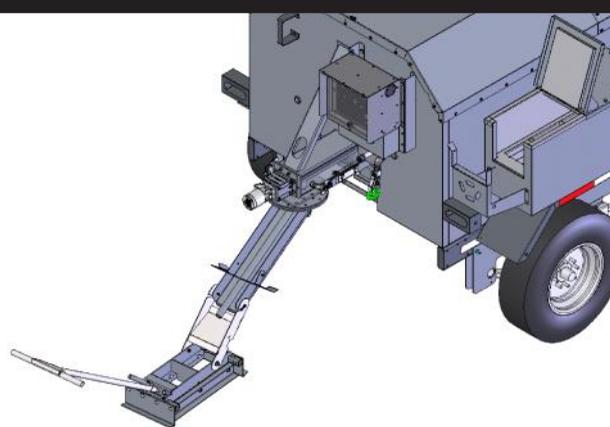
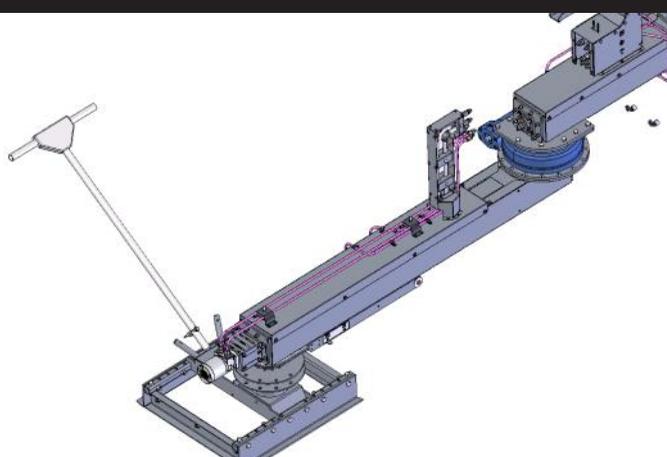
6" Tall x 8" Wide

6" Tall x 10" Wide

6" Tall x 12" Wide

6" Tall x 18" Wide

6" Tall x 24" Wide



	SMP-250	SMP-400
Shipping Weight	5900#	7000#
GVWR	14000#	14,000#
Length x Width x Height	219"x92"x106"	252"x92"x106"
Material Capacity	250 Gallons	450 Gallons
Fuel Tank Capacity	44 Gallons	44 Gallons
Hydraulic Tank Capacity	28 Gallons	28 Gallons
Tank Construction	7ga Tank/7ga Oil Jacket/10ga Insulation	7ga Tank/7ga Oil Jacket/10ga Insulation
Tank Configuration	Horizontal	Horizontal
Loading Height	64"	64"
Heat Transfer Oil	ISO VG 68 with 600°F C.O.C. Flash	ISO VG 68 with 600°F C.O.C.
HTO Capacity	63 Gallons	63 Gallons
Controls	Digital LED	Digital LED
Burner Type and Output	Diesel 240,000 BTU	Diesel 240,000 BTU
Hot Oil Circulating Pump	Viking HL 32	Viking HL 32
Engine	Kubota D1105 24.8HP Tier 4 Compliant	Kubota D1105 24.8HP Tier 4 Compliant
Hydraulic Pump	Eaton 420 Load Sensing 3.00 CID	Eaton 420 Load Sensing 3.00 CID
Hitch Height	Adjustable 22-34"	Adjustable 22-34"
Frame Construction	2"x4"x3/16" Rectangular Steel Tubing	2"x4"x3/16" Rectangular Steel Tubing
Axles	7,000#	7,000#
Tires	(4) 235/80R-16 LRE 8 Bolt Rim	(4) 235/80R-16 LRE 8 Bolt Rim
Brakes	Electric (Hyd Optional)	Electric (Hyd Optional)
Hitch	3" Pintle or 2-5/16" Ball	3" Pintle or 2-5/16" Ball



Stepp Mfg has the Largest Line of Asphalt Maintenance Equipment in the Industry



Asphalt Hot Boxes & Reclaimers



Asphalt Patch Trucks



Asphalt Melters



Asphalt Kettles



Asphalt Recyclers



Asphalt Distributor Trailers



Asphalt Mastic Machines



Water Trucks

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

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