PYTHON

5000 / 5000+
Pothole Patcher

A NEW APPROACH TO ROAD REPAIRS

SMOOTH ROADS AHEAD

Repair potholes at a fraction of the cost

Preserve the life of your roads for years

Produce clean, compacted, high-quality repairs in under two minutes

Keep your workers safely out of the traffic

Use all year round in nearly all weather conditions

Protect vehicles, drivers and motorcycles from damaging and life-threatening potholes

Use standard asphalt, hot or cold mix - no need to buy and store special materials

SuperiorRoads
SOLUTIONS

Does your road maintenance plan still fit?

Your network of roads is steadily growing, and the traffic on those roads is increasing exponentially.

Your method of fixing potholes worked great 60 years ago. But how well does it fit your current infrastructure?

It's time to look for new ways to keep your roads safe and well-maintained without breaking your budget.

Do you need to maintain traffic flow?

Don't disrupt traffic flow while repairing roads.

Our network of highways is the circulatory system of our economy. And when we restrict the flow of traffic, we're restricting its lifeblood.

The number of motor vehicles in the world topped the one billion mark in 2010. Every time you restrict the flow of that traffic, you are affecting the economy through lost productivity, late deliveries, and a ripple effect that can result in losses that can't be recovered. And if you add in the effect of lost tempers and impatient drivers, those losses can multiply.

When you're using a Python pothole patcher, there's rarely a need to close all or part of a road. For lower traffic areas, the highly visible warning lights and arrows on the Python are all you need to alert drivers. On busier highways, you'll likely need accompanying vehicle(s) to control the flow of traffic arround the Python. We refer to this as a rolling traffic closure.

That's a fact!

- In the United States alone, there are more than four million miles of roads.
- In 2015, nearly 3¼ trillion vehicle miles were driven in the US.
- To mill and resurface a 4-lane road, it costs an average of $1.25 million per mile. ($800,000 per km)
- In the United States, from 2003 to 2015, 1,571 workers lost their lives at road construction sites, an average of 121 per year.
- India reported 11,386 lives lost to pothole related accidents from 2013 to 2016
- According to a 2009 report, rough roads add $335 annually to typical vehicle operating costs for the average driver in the US. In urban areas, extra costs can be as high as $746 annually.

California Transportation Study

Evaluating Automatic Pothole Patching Equipment, Caltrans Division of Research, Innovation and System Information (DRISI) February, 2015.

"During one deployment operation, workers were able to fill 75 potholes and seven longitudinal voids in two hours, demonstrating unprecedented pothole patching productivity and efficiency with minimal impact on roadway traffic by using rolling lane closures."

The research also determined that repairs produced by the Python outlasted all other methods covered by the study.

Would you like to save lives?

Keep your employees safely out of traffic and in the cab of a Python. Too many workers suffer critical or fatal injuries when working on the roads.

Don't let potholes grow while waiting for the perfect time and perfect weather. Repair them with a Python before they cause damage to vehicles and become a dangerous traffic hazard.

Help prevent deadly accidents caused by potholes. Motorcycle riders will love you for giving them a smooth, safe ride.

Do you want to save money?

Keep your roads in good repair for less money.

Your roads cost millions of dollars to build. Make sure they last. For every year that you extend the life of one of your roads, you'll save millions of dollars.

Repair potholes once – don't make temporary repairs that have to be re-done.

Repair potholes while they are small and prevent damage to the vehicles travelling on your roads.

What Python can help you avoid

Reduce deadly accidents caused by potholes
Reduce death or injury to road workers
Reduce damaged vehicle lawsuits
Delay need to resurface the roads

How do we compare?

Manual methods

- Two to four workers required
- Inefficient for smaller repairs
- Potholes usually left to grow for weeks or months
- Throw-and-go results are temporary
- Repair crews exposed to traffic
- Road blockages and major traffic restrictions required
- * Estimated person-hours to repair 7,500 potholes = 1,875 hours
- * Estimated labour cost @$30/hr = **$168,750**

Spray patchers

- Use inconsistent mix of emulsion & rocks, dependent on operator skills
- Require good weather
- No compaction
- Leave dangerous rocks and messy emulsion behind

Python Pothole Patchers

- Single operator
- Repair average-sized pothole in under 2 minutes
- Deal with potholes all year round
- Thoroughly compacted repairs outlast surrounding road
- Operators stay safely inside cab and away from traffic
- Require rolling traffic closure on only the busiest roads
- * Estimated person-hours to repair 7,500 potholes = 250 hours
- * Estimated labour cost @$30 / hr = **$7,500**

Python Pothole Patchers

- Use genuine asphalt - either hot or cold - produced with quality controls
- Operate well in nearly all weather
- Thoroughly compact repairs up to 30 cm
- Leave clean, compacted patches ready for immediate traffic
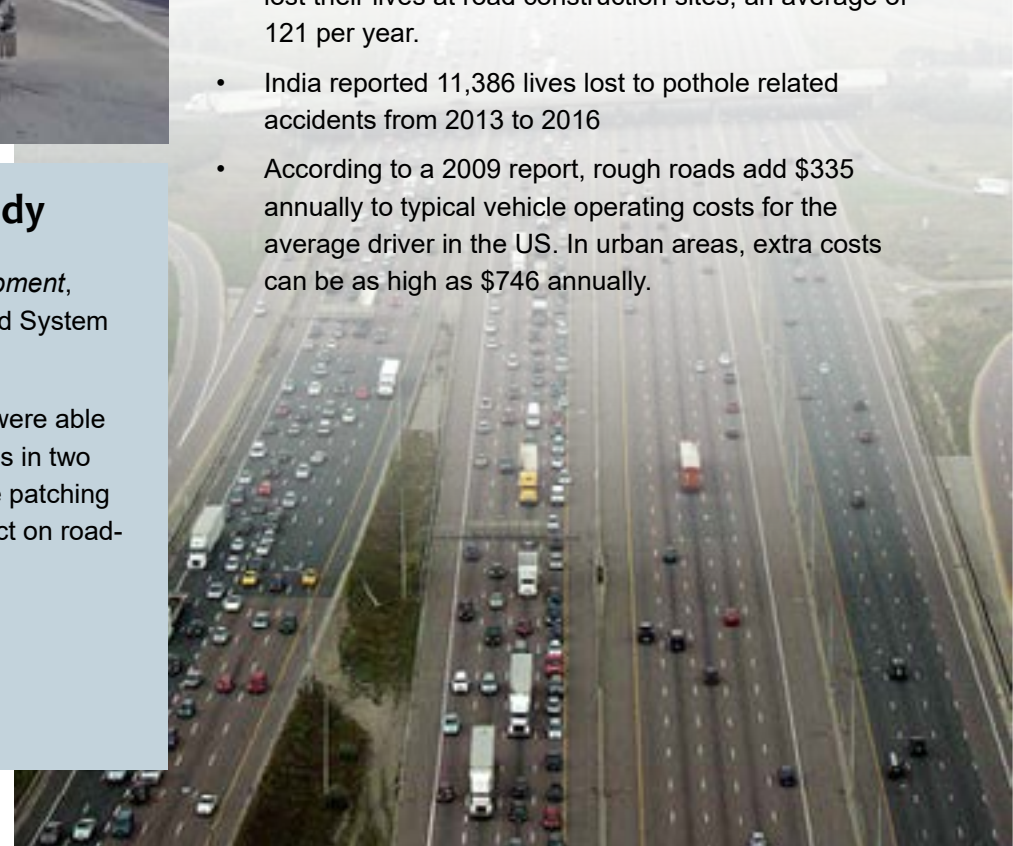
How the Python works

The operator fills the hopper with the asphalt mix of choice - either hot or cold. The hopper keeps the asphalt at the desired temperature by capturing heat from the engine exhaust.

Using in-cab controls, the operator positions the working arm over the top of the hole. An air jet nozzle blasts water, dust, gravel and other debris from the pothole, providing a clean contact area for the patching material. Depending on the conditions, the operator may decide to spray the area with an emulsive tack oil.

The auger system carries the required amount of asphalt mix from the hopper and delivers it to the pothole. The roller provides the finishing touches, compacting the asphalt and leaving behind a long-lasting patch that's superior to those created by manual methods.

The entire procedure takes less than two minutes for an average-sized pothole. The Python has sufficient warning lights so urban streets and smaller, lesser-travelled roads won't require any road closures. On busy freeways, an accompanying warning/crash truck can provide a rolling road closure.

SPECIFICATIONS

WEIGHTS - Python 5000
Gross weight- 28,220 lbs. (12,800 kg)
Curb weight: 18,000 lbs. (8,170 kg)

WEIGHTS - Python 5000+
Gross weight - 28,120 lbs. (12,760 kg)
Curb weight: 17,900 lbs. (8,120 kg)

DIMENSIONS
Wheel base: 114 in. (2,896 mm)
Overall width: 101 in. (2,565 mm)
Overall Height: 120 in. (3,048 mm)
Overall Length - Boom In: 256 in. (6,502 mm)

CAPACITY
Asphalt: 9,920 lbs. (4,500 kg)
Tack Oil: 50 Gallons (189 litres)
Water Tank: 25 Gallons (95 litres)
Chemical Tank: 15 Gallons (57 litres)

ASPHALT TEMPERATURE CONTROL SYSTEM
Adjustable from ambient temperature to 200ºF (93ºC)

OPERATOR CAB
Pressurized - Low Noise Level
Heater and Air Conditioner
Air Ride Operator Seat
Training Seat

2-SPEED TRANSMISSION
Hydrostatic Drive System, Capable of 55 mph (90 km/hr)

ENGINE – PYTHON 5000
Manufacturer: John Deere 4045 HF 485, EPA Tier 3
Power Rating: 173 HP (129 kW) @ 2400 rpm

ENGINE – PYTHON 5000+
Manufacturer: Cummins QSB 4.5, EPA Tier 4
Power Rating: 173 HP (129 kW) @ 2500 rpm

FUEL TANK CAPACITY
60 Gallons (227 Litres)

COMPACTION ROLLER
62 lbs/linear inch (11 kg/linear cm)

LIGHTING
Side Marker Lights, Arrow Board
Front & Rear Strobe Lights, Cab Mounted Work Lights

STEERING
Tilt Power Steering

BRAKES
4 Wheel Brakes, Hydraulic Assist Power Brakes
with Electric Operated Fail-Safe System