Construction
An Associated Construction Publication serving
Maryland, North Carolina, South Carolina, District of Columbia, and Virginia since 1933

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Hot Approach
To Asphalt Restoration

New infrared asphalt restoration system was designed to go where other systems have never before gone ...

By Ronnieceisha Reid, Power PR

It's hard to believe that with infrared asphalt restoration having been around for some 30 years, public utilities and contractors are still using ineffective, costly and time-consuming traditional cut-and-fill asphalt restoration methods.

“A major problem with infrared restoration systems has been the maneuverability and fitting in of large trucks that carry the systems,” said Roger Filion, owner of Kasi Infrared. “The Kasi Patriot was designed to bring state-of-the-art infrared technology to perform asphalt repairs where before they were difficult, and in some cases impossible.”

Infrared technology itself is an enormous improvement in asphalt repair. Traditional repairs leave seams that allow water to penetrate the repair, and the repaired, filled-in portions nearly always fail within a year or so. The infrared technology blends the new asphalt right in with the original by heating an area 6 inches to 8 inches beyond the perimeter of the repair; the new asphalt is then compacted with the old creating a seamless permanent restoration.

Infrared also cuts costs for repairs. Where an average 5-foot square repair requires four to five personnel and at least a day to affect, the same repair can be made with infrared using two people in about 20 minutes. In addition to substantial labor cost savings, this can make an enormous difference to clients when roadway traffic or business parking is blocked. Traffic management can be a physical as well as...

Before:

![Before Image]

After:

![After Image]
With its compact cab-over design, the Kasi Patriot delivers all equipment and functionality normally only available on larger infrared truck systems.

This economical approach, especially in heavy-traffic areas.

Traditional methods of asphalt repair dictate that all of the old asphalt be removed and be replaced with all new "virgin" material. Infrared uses the old asphalt in the repair, requiring only enough new material to bring the repair up to grade. The net result is a substantial reduction in material cost. Before compacting, a rejuvenator is sprayed on to the repair to replace the oils that were in the original asphalt mix but have been lost over time. The agent helps to secure the repairs.

Many Applications

Infrared can be used in all types of repairs where traditional methods have been used: alligator cracking, potholes, utility cuts, settling against concrete sidewalks or barriers, and more.

With its compact cab-over design, the Kasi Patriot delivers all equipment and functionality normally only available on larger infrared truck systems. One chassis carries a 48-square-foot infrared pavement heater, a 2-ton or 4-ton capacity asphalt rejuvenator, a large tool storage area, a compactor compartment, and a dumping waste bin. Propane tanks are tucked safely under the rejuvenator doors. Thanks to its less-than-22-foot length, the Patriot offers a functional turning radius that makes it possible to go where previous systems could not.

The Patriot also delivers cost-saving and safety features such as a 12-volt battery system instead of a 24-volt system. This battery system can also be recharged directly from the vehicle, in addition to a regular overnight charging system. Less propane is used; five tanks can last 16 to 18 hours. The system includes a 30-gallon water tank, eliminating the need to search for a source of water in the midst of a job. Hydraulics have replaced the traditional (and sometimes hazardous) cable winches for movement of compactors and chamber operation.

A very useful option for the Patriot is a timer that alerts the user when asphalt is heated to temperature. This is especially helpful when asphalt is being heated for the next job while a user is distracted performing the current job—a flashing LED signal alerts the user when the heat is complete, preventing overheating or burning the asphalt. Another cost-saving option is a blower motor with no brushes or armatures, meaning fewer parts to wear out and replace.

Kasi Infrared also provides full one-on-one personal training on the Patriot at no extra cost to the customer.