

## INTERSTATE 44 PHELPS COUNTY - MISSOURI

### Missouri Department of Transportation Automated High Friction Surfacing Treatment

MoDOT, as with the majority of highway agencies, has HFST specifications that do not permit manual installations. With the exception of locations of less than 350 square yards, agencies will not condone hand mixing, manual squeegees and throwing of bauxite from pick-up trucks or the use of chip-seal spreaders. These practices have led to poor quality project installations and spotty project performance.

#### Project Highlights

Due to a history of wet weather crashes and several fatal and serious injury highway departure incidents, MoDOT researched an effective long-term solution. After installing a "Highways for LIFE" project in 2013 with HFST to determine the effectiveness of this innovative safety device, the agency decided to construct a project on I-44 at the interchanges of Routes J and V.

Unlike the experimental Highways for LIFE project that was installed using manual squeegees and took several days to complete, the I-44 installation was undertaken with fully-automated equipment. The specification used by MoDOT was approved by AASHTO (American Association of State Highway Officials) and is used universally by all of the specifying highway agencies nationally for the installation of HFST.

#### Relevant Experience Gained

- Coordination of a slurry seal contractor to treat all shoulders with a State-approved slurry seal.
- Installation of HFST at night on the mainline and ramps under live traffic conditions with traffic control.
- Development of a QMP (Quality Maintenance Program) for the project with an on-site QMP Manager during the entire installation of all services.
- Independent testing of all materials to be used on the project and certification of the installation to meet the MoDOT specification parameters for the project.

#### Value to Customer

- HFST is classified by the Federal Highway Administration as a low-cost safety countermeasure.
- Fully-automated, specification-compliant application trucks.
- Safe, predictable, fast and continuous application.



High Friction Surfacing Treatments are eligible for federal and state funding through HSIP (Highway Safety Improvement Programs)