ANOTHER INNOVATION FROM INSTROTEK®: MOISTURE SENSITIVITY TESTING

Proper testing and screening of HMA mixes for moisture susceptibility is a crucial requirement for designing today's high-performing, longer-lasting pavements. **InstroTek's MiST (Moisture Induced Stress Tester)** is designed to simulate HMA pavement stripping mechanisms, which are due to water and repeated traffic loading.

The MiST consists of a pressurized chamber, which conditions samples by pushing and pulling temperature controlled water through a compacted asphalt sample, thus creating pore pressure and simulating the action of an automobile tire on a wet surface. The test can be performed at different pressures and temperatures, creating pore pressure and scouring within the asphalt layer.

Current moisture sensitivity tests suffer from poor repeatability and test times can take up to seven days. HMA conditioning in the MiST is automatic and can be completed in four hours or less. Plug the unit into a standard wall outlet; place the sample in the chamber, select your settings and the unit does the rest. The data from the MiST can be stored and transferred to a PC for evaluation and storage.

ASTM D7870
U.S. Patents 8,020,451 – 6,799,471 – 8312776

ADVANTAGES

- **Meets ASTM D7870**
- A revolutionary, representative new way to condition HMA for moisture sensitivity
- Designed to simulate HMA pavement stripping mechanisms
- Conditions samples in hours, not days for same-day testing
- Tests can be performed at different pressures and temperatures
- Testing is automatic and monitored by sensors
- Data from the MiST can be stored and transfered to a PC for analysis

MiST™

MOISTURE INDUCED STRESS TESTER

SPECIFICATIONS

Temperature Accuracy	±1 ˚C/±1.8˚F
Max Temperature	60 ˚C/140 ˚F
Sample Height	25 mm to 150 mm/1" to 6"
Sample Diameter	100 mm to 150 mm/4" to 6"
Pressure Accuracy	7 kPa/±1 psi
Pressure Control	7 kPa/±1 psi
Maximum Apparent Pressure	345kPa/50 psi
Electrical	115 VAC 20 A (Optional 230 VAC 10 A)
Weight	159 kg/350 lbs
Height	1.35 m/53"
Foot Print	0.53 m x 0.53 m/21"x21" square
Hydraulic Fluid	Hydraulic oil with a viscosity of 150 to 300 SUS at 38˚C (100˚F)

InstroTek®, Inc., Raleigh, NC *phone:* **919.875.8371** *e-mail:* **sales@InstroTek.com** *visit us at:* **www.InstroTek.com**
Other Locations: **Concord, CA** *phone:* **925.363.9770 • Denver, CO** *phone:* **303.955.5740 • Grand Rapids. MI** *phone:* **616.726.5850**
Las Vegas, NV *phone:* **702.270.3885**