

c / o / n / t / e / n / t / s

one Warranties, Are They Really Worth It?

WARRANTIES, ARE THEY REALLY WORTH IT?

By Lee Gallivan, FHWA Indiana Division



On the Interstate system it has been determined that the overall cost for the next 25 years to maintain the network smoothness at a constant 2002 value is \$1.08 Billion dollars using warranties, and \$1.47 Billion dollars for non-warranty projects resulting in a savings for warranty projects of 27 percent.

two Winterizing Your Nuclear Gauge

State DOT's and local agencies are wrestling with a lot of questions, one of which is the implementation of innovative contracting alternatives. The subject of Warranties is getting a lot of press these days as an effective method to increase the quality of the product and extend the performance life of pavements, but is it really worth the effort and cost to develop and implement Warranties?

"The question is whether 27 percent savings in real dollars is really worth the effort?"

The cost effectiveness of the warranted pavements, even though the initial costs are 5-10 percent higher, are significant when considering the extended life of the warranted pavements.

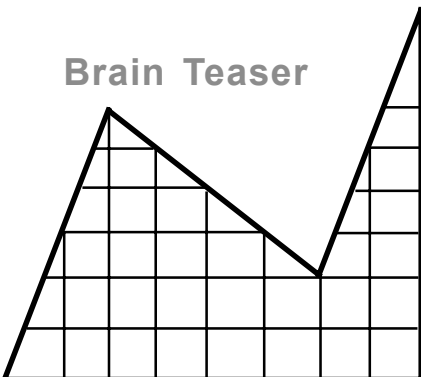
three CoreLok Update

Warranties are generally classified into two groups; 1) material and workmanship, and 2) performance. Indiana's experience is only related to performance warranties on high volume Interstate systems. Indiana HMA warranties range from full depth pavement replacements to thin preventative maintenance overlays. The performance of the warranted pavements is projecting a full 24 years of performance to match the condition of 15-year old non-warranted pavements when evaluating IRI and rutting performance data. All of the pavements, both warranted and non-warranted, have been subjected to similar traffic conditions and used similar asphalt binders and aggregates, and mixed in accordance with AASHTO criteria.

The question is whether a 27 percent savings in real dollars is really worth the effort? The State of Indiana believes it is. Indiana also believes that the extension of the pavement performance is definitely worth the effort. ■

four InstroTek Introduces the StripScan

Brain Teaser



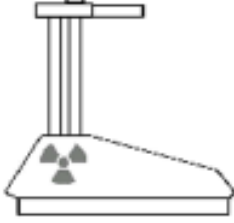
cut the figure into two identical parts
(answer on page 3)

StripScan
now available

see inside for details...

WINTERIZING YOUR NUCLEAR GAUGE

by Adam Harrison



T

he long hot summer has come to an end and its time to let your equipment cool down and take a rest for the winter season. Whether daily use will continue for your nuclear gauges or they will be stored, a few key things can be performed to ensure your gauge will continue to operate through and beyond the winter season.

Storage Preparation

Remove the gauge and all accessories so the inside of the case can be cleaned and dried. Also, inspect the shipping labels on the outside of the case.

There should be two readable Yellow II labels, two Aircraft Warning labels, and one Type A label. If you are planning to store the gauge for more than one month, discharge the batteries by running the gauge until the battery low signal is displayed. Nicad batteries should be stored with a low voltage in order to increase battery life.

Calibration and Basic Maintenance

As you are preparing your gauges for storage, check and see if they will need calibration, leak testing, and/or basic service. Calibrations should be performed once every twelve to eighteen months and ensures your gauge will perform accurate readings. Routine maintenance involves lubrication of the source rod assembly, cleaning the exterior of the gauge, and an overall inspection of the electronics contained in the gauge. Depending on the requirements of your state, leak testing should be done in either six or twelve month increments. It is a good idea to leak test your entire gauge inventory in the same month to reduce confusion and ensure that no gauge goes without the required leak test.

Storage

Nuclear gauges may spend most of their winter in storage facilities. The first step is choosing the correct type of storage is to choose a lockable, temperature-controlled room with no chance of water leakage. Gauges should be stored in the shipping case provided by the manufacturer secured with locks. Gauges should also be stored with the most recent calibration data sheet and leak test results, so that there is no confusion on the calibration status of the gauge once they are activated again for use.

Storing a nuclear gauge improperly can lead to long-term difficulties with the electronic and mechanical operation of your equipment. By following the above guidelines, many of these problems can be avoided. Contact InstroTek, Inc. to obtain labels, leak test kits, or any other part for your nuclear gauge and to schedule service before you place your gauges into storage. ■

LAUGH OUT LOUD !

A priest, a lawyer and an engineer are about to be guillotined...

In some foreign country a priest, a lawyer and an engineer are about to be guillotined. The priest puts his head on the block, they pull the rope and nothing happens — he declares that he's been saved by divine intervention — so he's let go.

The lawyer is put on the block, and again the rope doesn't release the blade, he claims he can't be executed twice for the same crime and he is set free too.

They grab the engineer and shove his head into the guillotine, he looks up at the release mechanism and says, "Wait a minute, I see your problem.....!?"



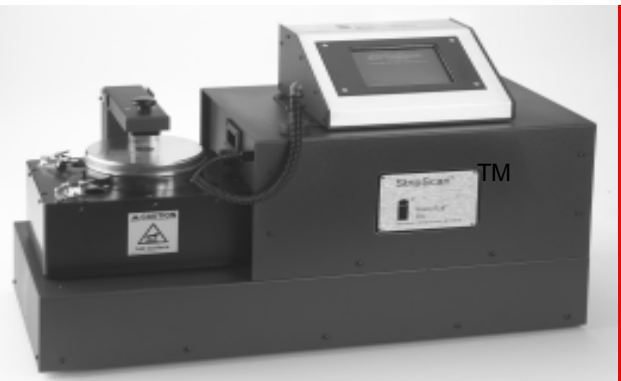
**"paper or plastic?"*

CoreLok Update



Introduced 4 years ago, the CoreLok quickly became one of the hottest products for the construction industry. Why? In short the CoreLok is the most versatile asphalt/aggregate testing system in the industry.

- ▶ Bulk Specific Gravity – ASTM D 6752.
- ▶ Maximum Specific Gravity- ASTM D 6857.
- ▶ Aggregate Bulk and Apparent Specific Gravity and % Absorption.
- ▶ Asphalt Permeability/Porosity.
- ▶ Percent Asphalt Content Calculation.
- ▶ The AASHTO specifications are currently under review.



INSTROTEK INTRODUCES THE STRIPSCAN

Anti-stripping Agent Measurement System

InstroTek Inc, Raleigh, North Carolina—9/9/2003—InstroTek announced that it will become the first in the industry to make available an anti-stripping additive measurement system. The StripScan continues InstroTek's line of fast, accurate and innovative products.

Stripping is a phenomenon of loss of bond or adhesion between the asphalt binder and the aggregate. The StripScan is the first instrument that can directly measure the amount of anti-stripping liquid additive in asphalt binder or in asphalt mixtures.

Due to a lack of a quick and convenient way of checking the amount of anti-stripping additives, asphalt pavement material is generally not tested as needed for the level of anti-stripping additives. The potential for variation in the amount and distribution of additives creates uncertainties in the quality of asphalt pavements.

The StripScan instrument from InstroTek, Inc can, in a matter of minutes, measure the presence and percentage of liquid anti-stripping chemicals in asphalt binder or asphalt mixtures. Having the advantage of checking for anti-stripping additives, allows asphalt technicians and engineers to identify problems and take corrective action.

The Method

The method involves three steps. Step one separates the anti-stripping chemical from the asphalt material through a heating process.

Based on a predetermined calibration, the StripScan calculates the level of anti-stripping chemicals in the vapor and displays the additive percentage in the sample. All operations on the StripScan are performed automatically and are controlled by a microprocessor unit.

Application

The StripScan can measure anti-stripping liquid chemical in both asphalt binder and asphalt mixture. It can be used in either a qualitative way which serves as a go / no-go check, or a quantitative way that can measure the percentage of anti-stripping chemicals in the material.

Availability

The StripScan unit is currently available direct from InstroTek. The unit comes ready for testing with all accessories. Please contact InstroTek for further details.

InstroTek has led the construction industry with new developments like the the ValiDator Calibration System and the CoreLok®. With the introduction of the StripScan, InstroTek again leads the industry in fast, accurate, and innovative products. ■



**Nuclear Gauge Tune-up
November thru March 2004
Now Only \$240**

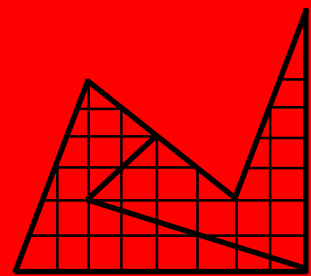
- ▶ No Hidden Costs
- ▶ Full Three Block Calibration
- ▶ Cleaning and Lubrication
- ▶ Full Mechanical Inspection
- ▶ Detector Signal Adjustment
- ▶ Top Bumper and Scaper Ring Inc.
- ▶ Extended Electronic Inspection
- ▶ 10% Discount on Additional Parts
- ▶ Fast Turnaround Times

Call to Schedule your Service Today!!

919.875.8371

Keep an eye out for the next issue of **I2I** for several new products from InstroTek!!

SPRING 2004



cut the figure into two identical parts



I2I

InstroTek Industry News