

## The Fugro **ADVantage**®

Introducing the **Fugro ADVantage**®, Automated Distress Vehicle, the pavement industry's first completely automated digital pavement distress surveying system. The ADVantage gathers high-resolution digital images of the pavement using a system of synchronized strobe lights and a digital camera. It is capable of covering 100% of the pavement surface at highway speeds on lanes up to 14 feet in width. The **ADVantage's** onboard systems are programmed to automatically adjust the data acquisition rate to allow for changes in vehicle speed, due to traffic conditions or traffic control devices. It has already been tailored to produce distress indices based on AASHTO, Universal Cracking Indicator and Texas DOT protocols. The **ADVantage** can also be programmed to meet the needs of any individual agency. All data acquisition and processing is conducted in real-time (as the images are being collected.)



*Fugro-BRE ADVantage® pavement rig*

### **Your Technical ADVantage**®

**On-Board Dual-Processing Real-Time Data Acquisition and Analysis** at highway speeds over 60 mph

**High-Resolution Pavement Surface Imaging** at a resolution of 1300 x 1024 pixels or 2048 x 1024 pixels

**Global Positioning System** using Precision Gyro Sub-System and GPS Positioning Sub-System

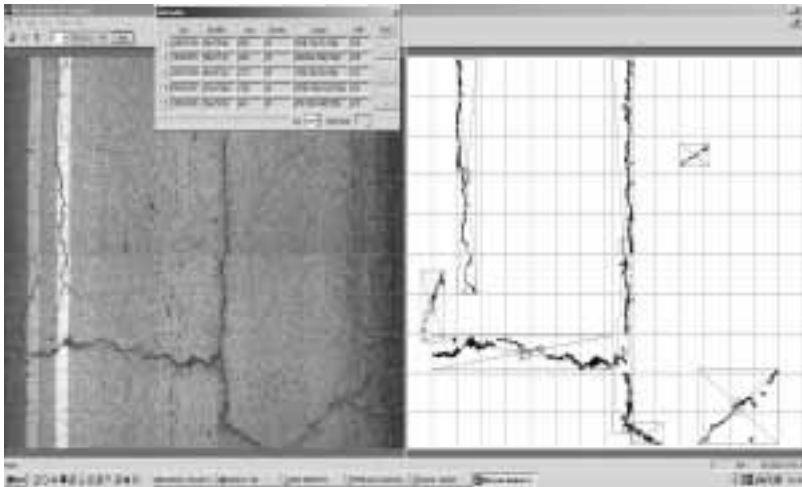
### **Your ADVantage**®

If you need to collect pavement distress data and reports with summary statistics, Fugro-BRE will give you the **ADVantage** with our:

- High-Speed data collection and analysis tools
- User-defined data collection and definition to meet your specific needs
- Computer-Based visual comparison of pavement image and identified distresses
- Accurate and Consistent data collection and distress identification
- Geographical Information System to provide an integrated data interface



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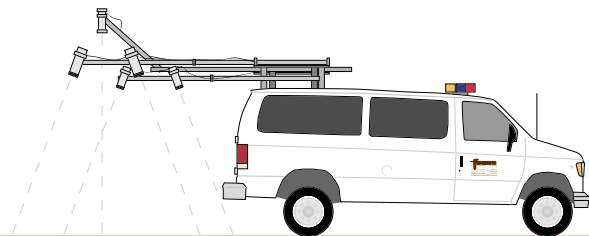
### **ADVantage Technology**

The screenshot to the left is taken from the distress identification software. It illustrates the ability to compare actual images from the pavement surface with the distress identified by the software. Cracks along the pavement are converted to pixels and identified using our crack identification software.

The screenshots to the right, from a Geographical Information System, show daily average daily traffic volumes and a user-defined distress composite index in combination with the pavement surface moduli for the selected highway. The ability to visualize the condition of a roadway network will be greatly enhanced with a Geographical Information System that integrates different types of data (such as distress, profile, FWD deflection, transverse profile, pavement layer moduli, right-of-way video and frequency of accident). This easy-to-use interface may be used to compare roadway characteristics at different locations, determine patterns in pavement performance, or determine the most accident-prone sections in a roadway network.



The **Fugro ADVantage**® is powered by technologies from Waylink Systems Corporation.



Call to set up a demonstration of the **Fugro ADVantage**® with Jerry Daleiden, P.E. at (512) 977-1800 or by email at [jdaleiden@fugro.com](mailto:jdaleiden@fugro.com)

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- Pavement Design, Research, Management and Consulting
- Nondestructive Testing, Examination and Evaluation
- Geotechnical Engineering
- Construction Materials Engineering and Testing



*Fugro-BRE is part of the Fugro group of companies with more than 5,000 employees in over 200 offices in 45 different countries.*