BridgeScan

Complete Bridge Condition Assessment System

BridgeScan™ is a complete, affordable GPR system that provides an effective tool for quickly determining the condition of aging bridge decks, parking structures, balconies and other concrete structures. The system is also used to obtain accurate concrete cover depth on new structures. With BridgeScan, repair costs can be estimated correctly, saving time and money.

Typical Uses

- Bridge deck condition assessment
- Concrete cover depth on new structures
- Concrete inspection – locate metallic and non-metallic targets in walls/foors
- Measure slab thickness
- Void detection and location
- Inspection of other reinforced concrete structures

Acquire Data

- Identify areas of deterioration inside reinforced concrete within bridge decks, parking structures, balconies, etc.
- Obtain accurate concrete cover depth and overlay thickness

Deliver Results

- Convenient self-contained cart-based design
- Integration with GPS
- Application specifc software for bridge deck condition assessments

Value

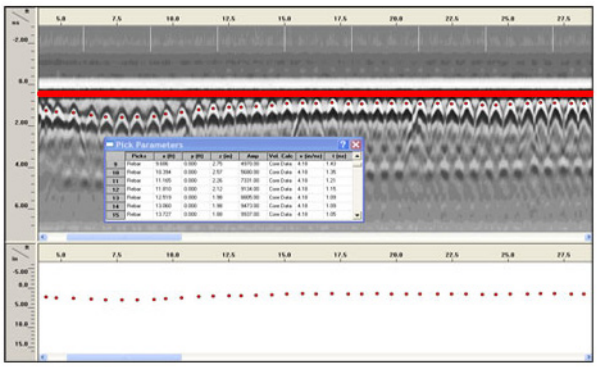
- Flexible system for concrete inspection and utility mapping applications
- Save money - Estimate structural condition accurately
- Two-year warranty

GSSI

www.geophysical.com

Concrete Cover Assessments

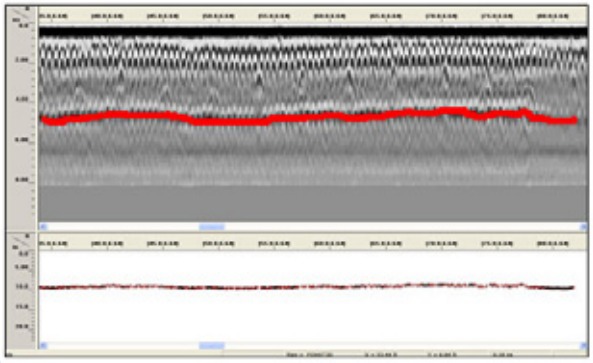
Engineers use concrete cover information to determine if reinforcement bars are protected from environmental effects. Transportation infrastructure professionals use BridgeScan to identify areas in which the cover is non-compliant.



Rebar
Intrepreted results
Deck surface

Measure Bridge Deck Thickness

Ground penetrating radar provides a nondestructive technique for transportation professionals in evaluating bridge deck thickness. GPR can obtain reliable thickness measurements in minutes and eliminate the need to core.

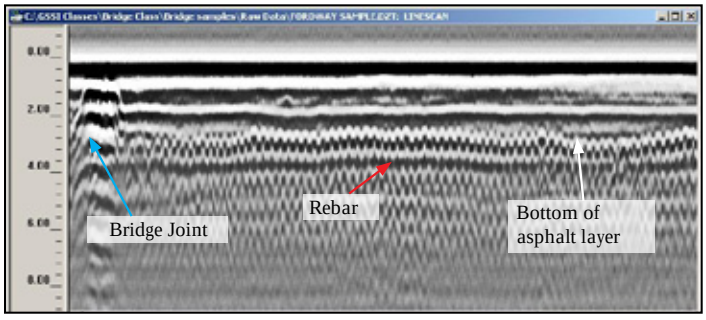


Reflection from bottom of bridge

BridgeScan Procedure

1 Data Collection

Collect the bridge data using a grid pattern and single lane closure.

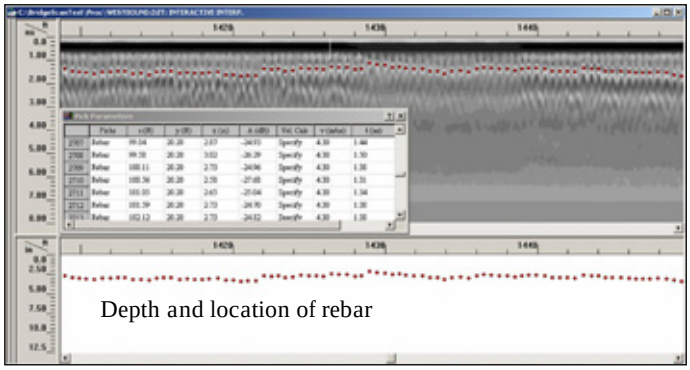


Raw data - asphalt overlaid bridge deck

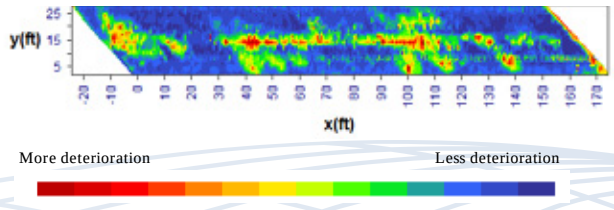
2 Data Processing

Interactive Interpretation Mode

Post-process the GPR bridge data in specially designed software to account for bridge skew angle.



Depth and location of rebar



3D BridgeScan data displayed with DPlot® software