Colorado DOT Tunnel Showcase

(pictured above):

Penetradar demonstrating how their GPR Tunnel Inspection System operates in a Colorado DOT tunnel.

The GPR antenna is installed on a rotating support that permits angular and radial movement, enabling access to all parts of the tunnel liner surface.

Colorado Tunnel #4 has been closed to traffic for years (pictured right) which provided a fantastic opportunity to collect high quality ground penetrating radar tunnel data for further research and development of analysis techniques.

Presentation

Air-Coupled GPR

A complete discussion was given on nondestructive testing GPR technology and its utilization in determining tunnel liner condition.

Field Demonstration

CDOT Tunnel #4

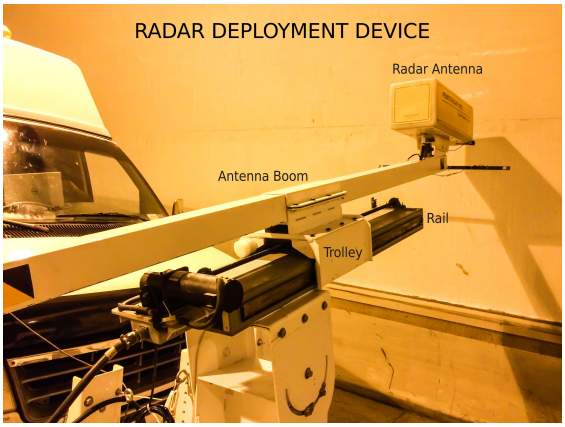
A full demonstration on the operation of the GPR Tunnel Inspection System Vehicle took place in abandoned Tunnel #4 in Golden, CO.

Publications

Based on SHRP2 R06G research, Penetradar's paper "Innovative Methods in Nondestructive Tunnel Evaluation" was published by the ASNT (American Society of Nondestructive Testing) Annual Conference.

The article details the operation of the equipment used, data collection methods to fully scan the tunnel's surface and implications of the results after analysis from Penentradar's GPR research work completed in two Pittsburgh, PA tunnels.

(pictured right) A detailed view of the Tunnel Inspection System articulating boom arm with GPR antenna installed.



Conferences

NEBPP Annual Meeting

Penetradar presented at the Northeast Bridge Preservation Partnership Meeting in front of state and regional highway and transportation agencies in New Brunswick, NJ on new and innovative nondestructive testing methods to be used for bridges and tunnels.

The International Bridge Conference

Penetradar exhibited at The International Bridge Conference (IBC) in National Harbor, MD where thousands of bridge owners/engineers, DOT's and bridge design companies gather to discuss developments in the bridge industry.