

# Portable Impact-Echo System

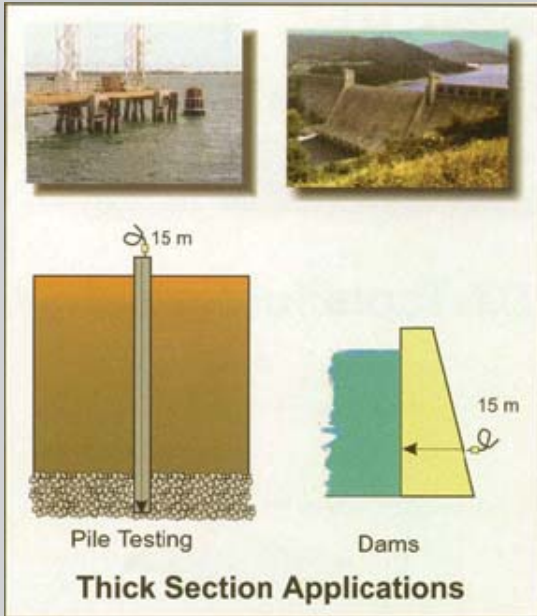


Reliable, non-destructive  
materials testing from  
**Giles**

# The Giles Portable Impact-Echo System (PIES) is a non-destructive way to inspect materials such as concrete and masonry.

It sends a mechanical impulse and the receiver near the impulse point measures the reflected stress wave, providing reliable information about materials below the surface, without causing destruction.

An advantage of Giles' PIES is its capability to test very thick and very thin structures.



## The PIES can investigate:

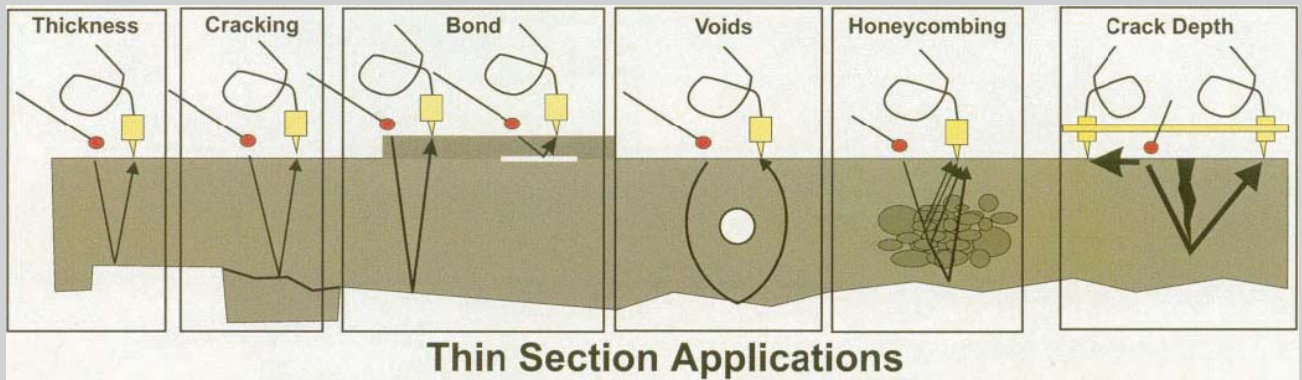
- Bridges
- Parking structures
- Buildings
- Tanks
- Stormwater retention boxes
- Dams
- Piles
- Tunnels
- Flood control channels
- Marine structures

## The PIES can detect:

- Thickness of slabs and footings
- Delamination of concrete
- Voids in concrete
- Voids in grout
- Voids in bonded post-tensioned tendons
- Subgrade voids under slabs
- Size and location of footings under slabs

## The PIES benefits:

- Owners can save money on redesign of older buildings
- Municipalities can plan pavement and bridge maintenance before deterioration is visible
- Structural engineers can have confidence in sizing of footings below slabs



Contact Giles Engineering for more information on how this state-of-the-art method for nondestructive testing can help you with your next project.



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