

In the Impact-Echo Test (IET) method small metal spheres are used to provoke a mechanical impact at a point on the surface of the concrete structure to be tested (beam, slab, tunnel lining, etc).

This causes a pulse which moves through the interior of the concrete in the form of compression waves, shear waves and surface waves. The waves extending through the interior of the structure are reflected back off any cracks, voids and changes in layers (changes in impedance).

The system comprises three elements:

- Low-frequency impact mechanism (metal spheres).
- Piezoelectric movement sensor.
- Laptop with data acquisition card.



and the resulting data is used to determine the depth of the defect. The equipment is used to test the structural integrity of concrete and other materials. The equipment is used to test the structural integrity of concrete and other materials. The equipment is used to test the structural integrity of concrete and other materials.