

# B<sup>DI</sup>

RAW DATA. REFINED RESULTS.



**DATA YOU CAN TRUST.**  
**RESULTS YOU CAN BUILD ON.**



# NONDESTRUCTIVE EVALUATION



**ACCURATE MEASUREMENTS COUPLED WITH  
QUALITY ANALYTICAL RESULTS IS THE  
FOUNDATION UPON WHICH BDI WAS BUILT**

## **WHO WE ARE**

BDI has been providing high-quality instruments, nondestructive evaluation, diagnostic testing, and structural monitoring services worldwide since 1989. Our core team is comprised of experts in civil engineering, physics, instrumentation design, and nondestructive testing. We develop and manufacture instruments, provide expert installation and evaluation services, and also provide safe and secure data management, making us the partner that you can trust.

Having conducted over a thousand successful projects around the world, we measure our success through the satisfaction level of our partners, end users, and stakeholders. We believe that reliable infrastructure can be best realized through collecting and analyzing real-world data.

# NDE SERVICES

BDI's Nondestructive Evaluation (NDE) Division is equipped with a wide range of specialized technologies for evaluating the in-situ integrity of all types of structural members. Typically, the client will use the test results to identify vulnerabilities, reduce risks, and improve their asset management processes.

BDI relies on several decades of technical expertise to evaluate a wide variety of steel, concrete, FRP, and timber structures. This depth of experience makes us your reliable source for data, analysis, and recommendations for maintaining your infrastructure.

BDI is staffed with a team of world-class engineers and technicians who are ready to respond quickly to obtain the data you need for making the best possible infrastructure management decisions.



## CONCRETE

- + Ground Penetrating Radar (GPR) with 3D Radar
- + PT Duct Void Identification
- + Infrared Thermography
- + Impact Echo (IE)
- + Deck Acoustic Response (SounDAR) - Automated IE for concrete surfaces
- + Impulse Response
- + Ultrasonic Tomography with MIRA
- + Pulse Velocity Testing
- + Ultrasonic Surface Wave
- + Half-Cell Potential
- + Electrical Resistivity
- + High-Speed Bridge Deck Evaluation
- + Chloride Penetration Testing



## STEEL

- + Ultrasonic Testing
- + Phased Array Ultrasonic Testing
- + Magnetic Particle
- + Dye Penetrant
- + Hardness and Fatigue Testing
- + Radiography
- + Fatigue Crack Inspection



## TIMBER

- + Visual/Vibration
- + Electrical Resistivity
- + Microboring
- + Sonic Echo/Impulse Response
- + Ultraseismic Testing
- + Integrity Testing

LEARN MORE AT [BDITEST.COM](https://www.bditest.com)



## GEOPHYSICAL

- + Mapping of Unknown Foundations
- + Spectral Analysis of Surface Waves (SASW)
- + Crosshole Seismic Wave
- + Parallel Seismic Survey
- + Utility Location
- + Stiffness Profile Evaluation

## NDE OF POST-TENSIONED CONCRETE

To evaluate PT ducts and determine the location of voids or other degradation, BDI utilizes a multi-technology approach. We can evaluate crack depths with UPV, determine the location of PT ducts and other structural elements with CWSF GPR, and locate voids and other anomalies with MIRA and IE. We also perform physical sampling via coring, concrete powder sampling, and borescope investigation to determine the root cause of the degradation and identify any cross-section of the tendons.

This information allows owners of these structures to make informed decisions concerning their preservation, maintenance, and other asset management programs to help with the efficient allocation of funding and other resources.

## BRIDGE DECK EVALUATION

BDI has implemented a multi-technology approach to inspections and nondestructive condition assessment of bridge decks providing data that can be utilized to determine the life cycle of the structure and appropriate times for maintenance, preservation, and repair or replacement. This multi-technology approach includes BDI's deck acoustic response (SounDAR) system for automated hammer sounding, high-speed ground penetrating radar (GPR) with 3D-Radar, infrared thermography (IR), and high-resolution imaging (HRI). IR/HRI can also be provided via unmanned aerial vehicle/drone when needed or appropriate. This NDE can be paired with physical concrete testing via cores or powder samples to test for chlorides, pH, sulfates, ASR, carbonation, strength, and full petrography.



## RELATED EVALUATION EXPERTISE

- + Inspections of Guy Wire using Non-Contact Measurements
- + Bridge ratings using AASHTOWare Load Rating Software
- + Online hosting of evaluation data for instant and reliable access
- + Concrete and pavement coring
- + Structural, geotechnical, geodetic, and environmental monitoring

BDI provides cost-effective instrumentation along with testing and monitoring services to federal and commercial clients worldwide. Our engineers design and configure the instruments we use in order to ensure the quality of our measurements.



**COLORADO (HQ)**

+1.303.494.3230  
info@bditest.com

**ARIZONA**

+1.773.820.7333

**ILLINOIS**

+1.773.820.7333

**LOUISIANA**

+1.225.366.9321

**NEW YORK**

+1.212.931.0916

**NORTH CAROLINA (NDE)**

+1.919.999.3779

**PENNSYLVANIA**

+1.267.448.0080

**VIRGINIA**

+1.540.822.0544

**WASHINGTON**

+1.206.501.3216

**BDITEST.COM**

Cage: 1GYL8

DUNS: 557400785

Unique Entity ID: V7EJGQCQ9LL7

NAICS: 541330 (primary), 541360, 541380, 541990, 334419,  
334511, 334515, 334516, 532490

FAR & AASHTO-Compliant as Prime or Subconsultant

