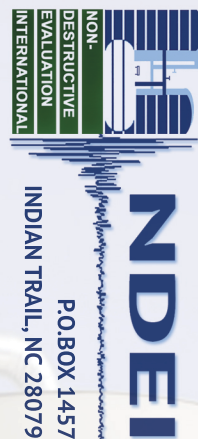


NDEI's Composites Division specializes in equipment manufactured from composite materials such as Fiberglass, Furan, Kevlar, Graphite Epoxy, etc. The failure modes which need to be detected in these materials are markedly different than those of metal structures. Furthermore, many of the traditional NDT methods which perform exceptionally on metal structures are ineffective on composites. Therefore, the structural evaluation of a composite tank, vessel, or piping system requires a unique combination of technician expertise and specialty NDT methods.

For Composite Equipment that falls under OSHA's Process Safety Management of Highly Hazardous Chemicals - (1910.119), or the EPA's Risk Management Program guidelines, the Composites Division recommends a procedure that definitively meets the "Good Engineering Practice" criteria outlined in state and federal regulations. Using NDT methods including, but not limited to Acoustic Emission (AE) Testing, Barcol Hardness, Composite Ultrasonics, Internal Visual Inspection, and Digital Photography, we provide a reliable and quantitative assessment of the tank, vessel, or piping system. Because the Acoustic Emission (AE) Test is supported by National Engineering, Testing and Personal Qualification Standards, it provides a high level of comfort with respect to regulatory compliance. Further, the recommended inspection/testing procedure enables the customer to implement an effective predictive maintenance program for production, equipment repairs, and capital budgeting.



NDEI

Vessel and Piping Inspection
for a cleaner, safer Workplace

OFFICE: 704.234.0236

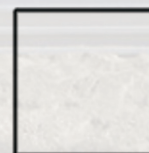
TOLL FREE: 800.892.4873

FAX: 855.327.0370

NDEI@WINDSTREAM.NET

WWW.NDEI.NET

If you do not currently have a preventative maintenance program in place for your metal and / or composite equipment or would like to receive a detailed proposal, please feel free to contact us anytime.



NAME OF RECIPIENT
ADDRESS
CITY, STATE, ZIP CODE





NON DESTRUCTIVE TESTING AND INSPECTION SERVICES

Non Destructive Evaluation International (NDEI) has been providing testing and inspection services to our customers for over 30 years. NDEI works to ensure regulatory compliance and to assist in the development and implementation of our customers' preventative/predictive maintenance programs. Through our services, we help our clients to minimize the risk of catastrophic system failures with the potential of adverse effects to the environment and employee health. Our customers include multiple Fortune 500 companies in the Chemical Process, Pharmaceutical, Petrochemical, and Pulp & Paper industries.

All NDEI Technicians are SNT TC-1A certified in the appropriate test methods and have several years experience in the application of the methods to arrive at practical solutions. In addition to the above inspection and testing methods, each technician is certified in Confined Space Entry (CSE), First Aid, and CPR.

Safety is our number one concern at NDEI.

All technicians have received initial and continuing safety training both in-house and through outside providers. NDEI utilizes the Association of Reciprocal Safety Councils, Inc. (ARSC). ARSC is made up of twenty-one other nationwide ARSC affiliated safety councils and maintains a reciprocal agreement among its' affiliated safety councils.

SERVICES

TRADITIONAL NON DESTRUCTIVE TESTING:

- Ultrasonic Testing
- Pit Gauging
- Dye Penetrant / Liquid Penetration Inspection
- Barcol Hardness Testing
- Magnetic Particle Inspection (MPI)
- Internal and / or External Inspection

ADVANCED TESTING TECHNIQUES:

- Acoustic Emission (MONPAC-PLUS Certified)
- API 653 / API 510 Services
- Remote Crawler Ultrasonics
- Robotic Visual Inspections
- Digital Photography and Video



Acoustic Emission Testing of Ultralite Composite Pressure Vessels at manufacturer's facility in ROCK HILL, SC

Acoustic Emission Testing is applicable to both composite and Metal Tanks/Vessels. Despite its name, AE has nothing to do with sound. Instead, the test finds defects by monitoring elastic strain waves induced in the tank/vessel by placing it under load. The technique is ideal not only for aging tanks and piping, but also to verify integrity of repairs. Clients can also benefit from AE testing of new vessels by ensuring the equipment is free from manufacturing defects or damage which occurred in transit. AE testing can be performed either at the manufacturer's facility or after the tank/vessel has arrived to its final destination.



Ultrasonic Thickness Testing being conducted via Remote Magnetic Crawler.



Ultrasonic Testing is used for the detection of internal and surface defects in sound conducting materials. Ultrasonic Thickness Testing permits quick and reliable measurement of thickness without requiring access to both sides of an object, tank, or piping system. A pulse-echo ultrasonic thickness gauge determines the thickness of a sample or structure by measuring the time required for a short ultrasonic pulse, generated by the transducer, to travel through the thickness of the material being tested, reflect off the back surface and return to the transducer. The time is measured and divided by two to account for the signal to and back, and then multiplied by the velocity of sound in the test material. Ultrasonic Testing can be conducted either **Manually** or via **Remote Magnetic Crawler**.