BNA
BASIS NORTH AMERICA

01 Acoustic Inspection



ASSET HEALTH & RELIABILITY

BNA GUARDIAN

See the fault before it shuts down your facility.

An inspection program designed to bring to light the signals that currently remain hidden in your critical assets, before they lead to a facility shutdown, a safety risk, or an avoidable cost.

Asset Health & Reliability

+1 713 779-3008

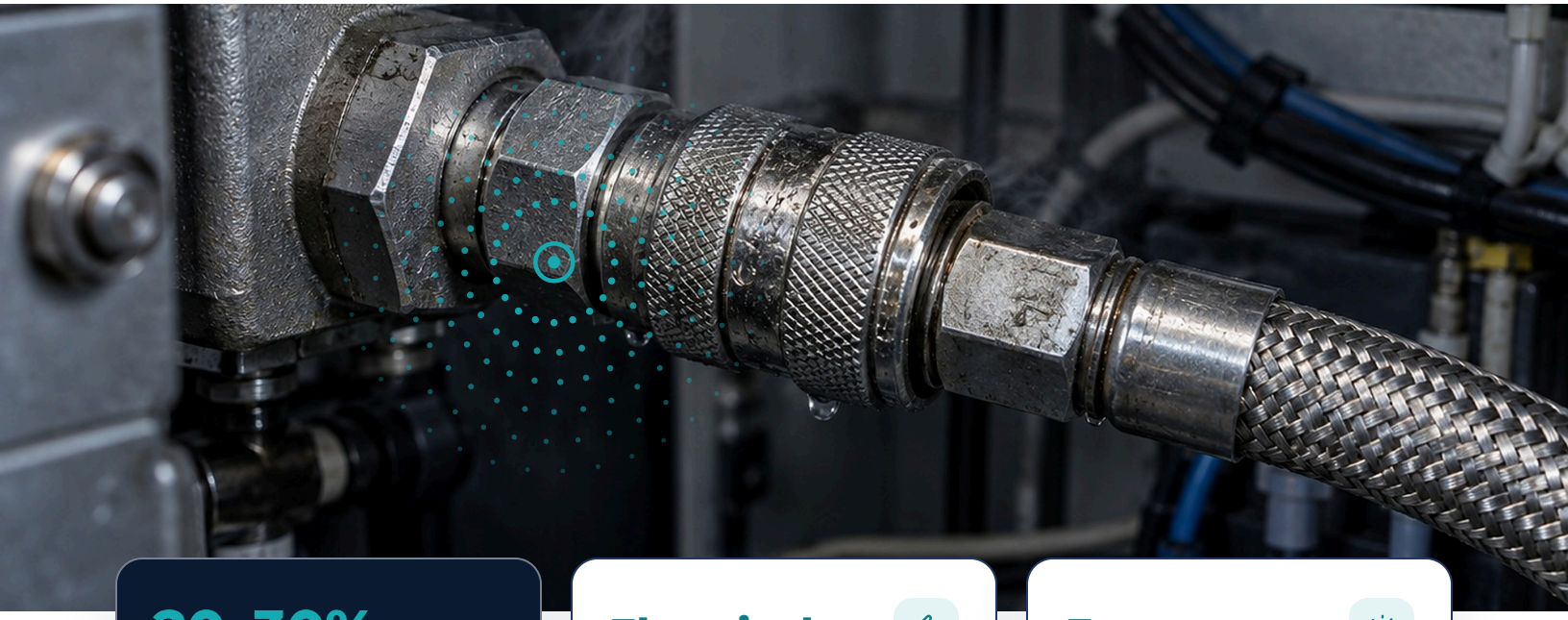
sales@basisnorthamerica.us

THE PROBLEM

What you don’t see will eventually come at a cost

In most industrial facility, the signs of an impending fault are present long before anyone notices them: a compressed-air leak behind a panel, the onset of partial discharge in an electrical switchboard, a seal beginning to fail.

The problem is not a lack of attention: these signals are inherently difficult to detect through traditional visual or auditory inspection.



20–30%

Wasted energy

of a compressor’s output can be lost through undetected compressed air leaks.

Source: U.S. Department of Energy

Electrical

Silent risk

Partial discharges in MV/HV equipment rarely produce detectable warning signs before failure.

Emergency

Unplanned shutdown

An emergency intervention consistently costs more than a planned intervention scheduled in advance.

> **In almost every case, the difference between an avoidable cost and an unplanned facility shutdown is simply when the problem is detected.**

THE APPROACH

See earlier, decide better

BNA Guardian is based on condition monitoring and predictive maintenance: the now-established idea in industrial asset management that the health of a facility should be assessed continuously, not checked only when something stops.

BNA Guardian is the suite of condition monitoring technologies we make available for your critical assets: acoustic inspection, infrared thermography, and continuous vibration monitoring. Each measures a different dimension of an asset's health, and together they provide an increasingly complete picture.

The starting point is acoustic inspection: the quickest to deploy, the least invasive, and the one with the most immediate return. A practical way to get started without having to rethink your entire approach to maintenance straight away.

The survey is carried out while the facility is operating: no production interruption.

Thermography and continuous vibration monitoring can be added naturally along the way when you want to broaden the picture of your assets' health, at your own pace, based on the facility's priorities.

- **Acoustic inspection**
- **Infrared thermography**
- **Continuous vibration monitoring**



WHAT WE DETECT FOR YOU

A targeted survey without shutting down the facility

Acoustic inspection identifies issues that normally remain hidden from routine checks, using a non-contact survey that requires neither shutting down the facility nor direct access to energized equipment.



Gas and compressed air leaks

Identified and precisely located, even in noisy environments or areas that are difficult to inspect visually.



Partial discharges in MV/HV electrical equipment

An early indication of insulation deterioration, often years before failure.

Professional-grade inspection technology

The inspection is carried out using industrial-grade acoustic imaging cameras for precise localization of the signal source.

Economic impact quantification

Each detected leak is quantified (estimated flow rate, energy impact, and associated financial cost) so you can immediately assess the priority of the required action.

Zero impact on production

The inspection is carried out while the facility is running, with no scheduled or unscheduled shutdowns.

Safety for inspectors

Non-contact measurement, which reduces personnel exposure to energized or pressurized equipment.

The result is not just a list of anomalies, but an overview linked to three levers that matter to facility managers: reduced energy consumption, operational continuity, and compliance with the safety and environmental standards most relevant to your sector.

Reduced energy consumption

Operational continuity

Compliance with safety and environmental standards



HOW IT WORKS

A simple process in four steps

From the initial discussion to the action plan, without complicating your facility's operations.



01 **Initial discussion**

Together, we understand your facility's priorities, critical assets, and operational constraints.

02 **Planning**

We define the areas and equipment to cover based on your objectives.

03 **On-site assessment**

Non-invasive acoustic inspection, with the facility running.

04 **Report and action plan**

Findings prioritized: what to address immediately, what to plan, and what to monitor.



WHY WORK WITH US

A partner who speaks your facility's language

Hands-on field experience

Our team works every day with critical assets and facilities in the Oil & Gas and industrial sectors: we understand operational constraints before the inspection even begins.

A report designed to be used, not filed away

Clear priorities, operational language, ready to share with maintenance, HSE, and management. No technical interpreter needed.

A relationship that can grow over time

Not a one-off inspection, but the start of a reliability journey built together, one step at a time.



BNA GUARDIAN

Let’s talk about your facility

A no-obligation technical discussion to understand where to start looking for what remains hidden in your critical assets today.

sales@basisnorthamerica.us

+1 713 779-3008

Headquarters
11777 Katy Freeway, Kirkwood Atrium Office Park,
South Building, Suite 330, Houston, TX 77079, United States

BNA
BASIS NORTH AMERICA

Basis North America Inc.
Asset Health & Reliability