ACOUSTIC EMISSION TESTING

AMERAPEX
Committed to Technical Excellence

STRUCTURAL DEFECT DETECTION

Acoustic Emission (AE) testing has proven to be a method of preference for detecting the presence of defects quickly and reliably. AE testing uses sensors to identify high frequency signals resulting from structural defects performing under stress.

EARLY DAMAGE DETECTION

MINIMIZES DOWNTIME

INCREASES STRUCTURAL INTEGRITY

AE TESTING METHOD APPLICATIONS:

- Metal pressure vessels and piping
- FRP vessels and pipings
- Reactors and hot circuit piping
- Heat exchangers
- Deaerators, etc.
- Tank bottom for storage tanks
- Full structural test on storage tanks

COMMON DEFECTS DETECTED:

- Material crack growths
- Active corrosion
- Rubbing
- Leaks
- Stress corrosion
- Fatigue

AE TESTING V. SEISMIC TESTING

- Seismic industry uses low frequencies between 0-10 Hz, while AE testing uses higher frequencies between 20-400 Hz. Higher frequencies are more effective for noisy environments.
- Seismic industry places sensors miles away from the source, while AE testing places sensors approximately every 10-15 feet.

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