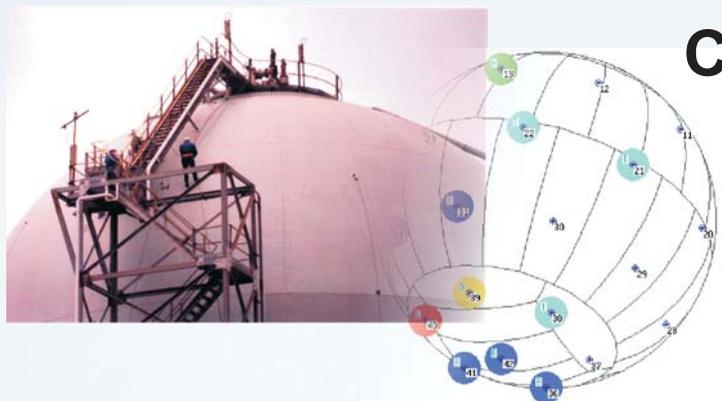
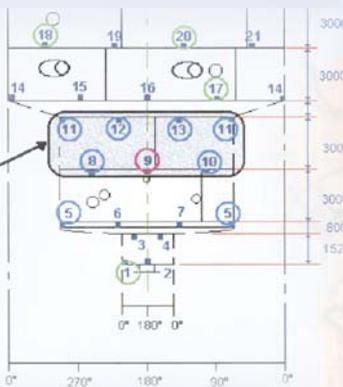


## Pressure Vessel Integrity

**Acoustic Emission techniques** have been developed and used by the industry world-wide for the inspection of the **integrity of pressure vessels (spheres, bullets, towers etc.)**. The method follows **ASME-V art.12** procedures and the **MONPAC** AE method, which combined with **high-end AE systems** ensure **complete (100%) vessel testing and defect characterization** during **hydro-test** or even **in-service with product**.



## Cryogenic Tanks Inspection

Acoustic Emission inspection for the integrity of **low temperature tanks** (ammonia, butane, propane etc.) using **MONPAC** and proprietary Procedures. Permanent sensor installations under the insulation Are possible to facilitate Testing.



## Cool Down Testing

Acoustic Emission (AE) test for **hot, thick-wall vessels** (reactors, columns, high energy piping etc.) during cool-down. Additional AE tests on such equipment can be continuous monitoring and short duration inspections.



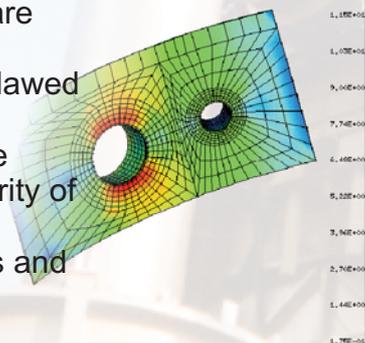
## Transformer Testing

Testing of Large Grid Transformers is done by Acoustic Emission techniques to locate Partial Discharge and assess the level of criticality of the internal discharge with a rapid and complete test.



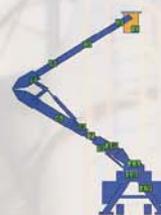
## Feasibility Studies & Consulting Services

Fitness-for-Service (FFS) assessments are quantitative engineering evaluations that demonstrate the structural integrity of a flawed or damaged component. The damage is recorded by NDT (e.g UT thickness). The results can be used to evaluate the integrity of components, to make run/repair/replace decisions, to reduce unnecessary repairs and avoid unplanned shutdowns.



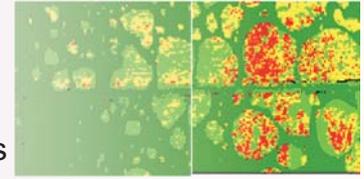
## Aerial Manlift Devices

Testing of the integrity of Aerial Manlift devices is performed using AE techniques to cover in a single loading test metallic and FRP sections of the booms and turntable with pass-fail criteria.



## Vessel Thickness Mapping

With latest technology automated (robotic) scanners Envirocoustics offers UT thickness mapping of surfaces such as tank and vessel walls, tank floors etc. The automation of the process ensures high quality results in minimum time.



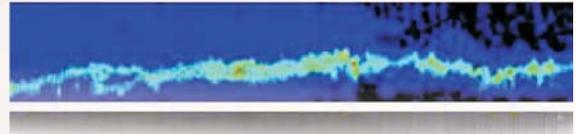
## Tube Inspection

Utilizing **guided ultrasonic waves** 10's of meters of pipe can be examined from one location.

Specialized UT techniques and equipment provide **thickness mapping** of heat exchanger, boiler etc tubes with high resolution results and minimum test times.

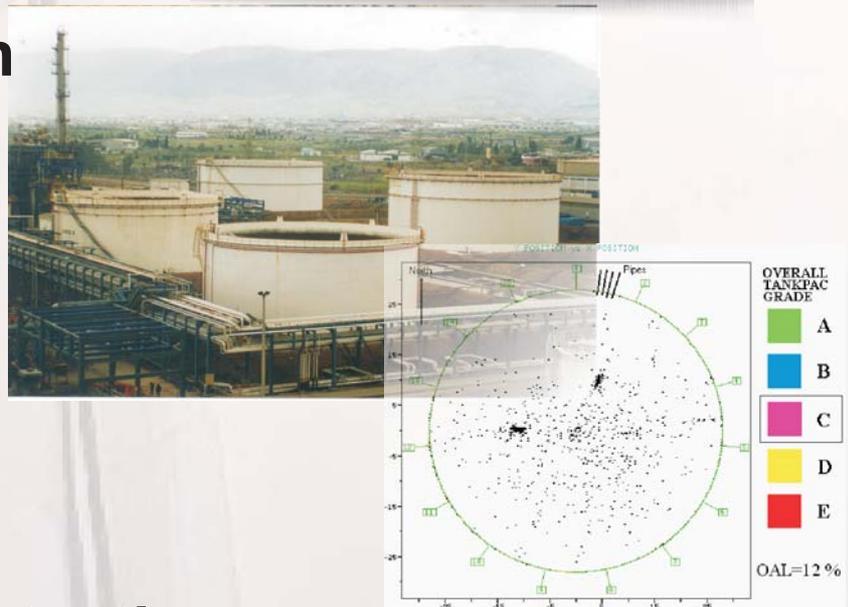
## Weld Inspection

The automated scanners can be used to scan welds at oblique angles simultaneously from both sides of the weld providing a one-pass complete coverage maintaining high quality results and speed.



## Tank Floor Condition

TANKPAC is an Acoustic Emission procedure for Tank Floor Condition Assessment. It provides rapid testing (hrs) with minimum disruption to operations (tanks are tested with product). The speed of the test and the quality of the results grading the condition in five categories offer unique possibilities for plant management and repairs planning.



## Leak Detection

Simple and rapid **valve leakage** testing and quantification is possible using Acoustic Emission technology. In minutes the level of valve leakage can be assessed.

**Buried pipe leak detection:** Location of leaks in buried piping by Acoustic Emission. Quick testing by installing sensors at selected positions.