As part of any inspection plan, pressure vessels are required to undergo periodic, statutory inspection to ensure continued safe and reliable operation.

Traditionally this has been achieved by means of an internal visual inspection (IVI), however, recent developments in NDT technology has allowed for reliable non-intrusive inspection (NII) techniques to be performed that can then reduce the high costs associated with shutting down a vessel and performing an IVI inspection.

Bilfinger Salamis UK offers the latest NDT technology to ensure an NII gives all the inspection information necessary to continue the safe and reliable operation of the vessel.

As IVI and NII are two different forms of inspection, there need to be assurances that the methods chosen for NII are still capable of obtaining the information required to ensure continued safe and reliable operation. This must be done prior to the inspection using recommended practice documents such as DNV-RP-G103 and/or the industry accepted HOIS NII Decision Guidance document, that is based on a comparison of techniques used in NII to IVI.

**Bilfinger Salamis UK - Safest and Most Appropriate Techniques**

Once this has been done the most appropriate NII techniques can be selected to achieve the required information from the inspection.

Bilfinger Salamis UK can assist in the full development of any NII plan and due to our close relationships with equipment suppliers, we can always offer the safest and most appropriate techniques to achieve the best results possible.

Commonly applied NII techniques include:

- Time of flight Diffraction (TOFD)
- Phased Array Corrosion mapping
- 0 Degree Auto UT
- Chime®/M-skip®

**Benefits:**

- Removal of the associated hazards of man entry of vessels
- Reduction in the man power requirements for a vessel inspection
- No requirement to clean the internal surfaces of the vessel
- No production losses associated with vessel shut-down
- No issues with reinstating a vessel after a shutdown