Abstract
Inspection using NDT methods is playing an increasingly important role in the integrity management of safety and business critical equipment. There is a trend away from using inspection simply as a means of providing assurance that the current condition is acceptable towards making comprehensive use of the information obtained as a means of longer term integrity management decision making. A key requirement is that the inspection carried out provide reliable information on the true condition of equipment, even when there may be only early stage degradation present. In order to maximise the benefits of inspection in the integrity management process there is increased emphasis on the reliability and accuracy of the inspection methods used. This paper considers developments in a number of areas in which new approaches to inspection, and the way in which the data is used, are leading to substantial improvements in integrity management. The areas considered are Non-intrusive inspection of pressure vessels and application of statistical analysis methods to the integrity management of pipework. The paper covers the requirements for NDT feeding into these applications and demonstrates the benefits of enhanced inspection approaches.

Keywords: Pressure vessels, pipework, non-intrusive inspection, integrity management, statistical analysis