Pipeline owners and operators are often faced with a number of challenges when it comes to assessing integrity, which are often centered around access, particularly when the pipework is buried or subsea. In addition, welds create potential areas of weakness that require inspection to confirm integrity.

Inspecta International offers its clients a number of services designed to assess the integrity (internal and external) of pipework, which takes the uncertainty out of knowing its condition. Client corrosion monitoring programs may consist of one or more of the following:

- **Cathodic Protection (CP)**
  
  CP is widely used for controlling corrosion of metallic pipework or structures that are in contact with electrolytically conducting substrates such as soil and water, by reducing the metal’s corrosion potential and thus its corrosion rate.

- **Direct Current Voltage Gradient (DCVG)**

  DCVG uses voltage gradients within the substrate surrounding a buried pipeline to assess its coating, allowing defects to be located and sized. To be effective the pipe has to be protected by an impressed current cathodic protection system, although a temporary equivalent can be installed for the purposes of the inspection.

- **Close Interval Potential Survey (CIPS)**

  CIPS is designed to assess protection along the entire length of pipeline, by measuring the pipe / soil potential using a fixed trailing wire connected to the pipe and a set of reference electrodes located along the inspection length (typically every metre).

- **Intelligent Pigging**

  An intelligent pig is a device, containing one or more measuring instruments, that is placed inside a pipeline to collect data along its length in an attempt to assess the integrity of the pipe. Once analysed, the information can be used to pinpoint areas of concern and help coordinate maintenance resources appropriately.

- **Welding Inspection**

  Various NDT techniques can be used to assess the integrity of pipeline welds, be it during its construction or an in-service inspection. In addition to conventional methods, more advanced techniques can be more cost effective, including phased array, time of flight diffraction.

*Should you require further information regarding our Pipeline Integrity services, please contact Inspecta International by emailing technical@inspectaint.com, or contact your local office who will be happy to answer any queries [www.inspectaint.com](http://www.inspectaint.com).*