



Engineering Specialist Services – Assessment of plant

Remote visual inspection



Remote visual inspection (RVI) equipment usually involves a hand-held manipulator with camera and light source which feeds back images to the operator. We carry out RVI for customers where confined space entry or working at height is an issue.

What does the service include?

- An initial assessment of each item of equipment from which a suitable inspection plan can be devised minimising the risks from entering confined spaces or working at height.
- RVI in accordance with the inspection plan, using boroscopes, fibrescopes and other bespoke equipment.
- A comprehensive inspection report for each item of equipment featuring picture and video evidence, along with any recommendations for remedial actions.

Who does it affect and why?

Work at height affects any place where there is a risk of a fall which is liable to cause personal injury. Duty holders should avoid working at height where they can. RVI can offer an alternative means of examination which ensures compliance.

According to the Health and Safety Executive a number of people are killed or seriously injured in confined spaces each year in the UK. This happens across a wide range of industries, from those involving complex plant through to simple storage vessels. This figure includes not only those people working in the confined space but also those who attempt rescues without proper training and equipment.

The Confined Spaces Regulations 1997 state that: "No person at work shall enter a confined space to carry out work for any purpose unless it is not reasonably practicable to achieve that purpose without such entry".

Most confined spaces are fairly easy to identify, for example, enclosures with limited openings, storage tanks, reaction vessels, silos, etc. However, some spaces may be equally as dangerous, for example, vats, combustion chambers in furnaces, ductwork.

The main dangers that can arise are lack of oxygen, poisonous gas, fumes or vapour, liquid fill, fire and explosion, residue left in the tank and dust.

Another opportunity for applying RVI is where access for conventional examination is limited. For example, gas loaded hydraulic accumulators where non destructive testing and RVI can be combined to provide an alternative to the disruption of proof testing.

Our approach

First we'll gauge the practicalities of carrying out RVI. This is usually achieved from drawings or photographs of the equipment. Once an inspection plan has been devised, we'll carry out the inspection and issue a report. The report includes results of our inspection, any recommendations for improvement and any relevant photographs and videos.

We have a long established expertise in the examination of equipment. This enables us to identify problem areas and propose the best means of inspection for a particular installation.

Linked services include non-destructive testing and risk based inspection.

For more information
contact us on

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or visit
[www.zurich.co.uk](http://www.zurich.co.uk/engineering)
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