Visual Testing (NDT VT)

Visual testing (non-destructive testing) relies on the adequate illumination of the test surface and the technician’s visual competence. Visual testing requires training (for example, knowledge of product and process, anticipated service conditions and acceptance criteria), and visual testing deploys specialised range of NDT VT equipment. Defects found by other NDT methods are ultimately substantiated by visual inspection. VT can be classified as direct visual testing and remote visual testing.

The most common NDT methods, MT and PT, are scientific ways of enhancing the visual examination. The equipment needed is simple. For direct, you need a light source, various measurement devices or gauges and magnifying devices when appropriate. For remote viewing or internal inspection, equipment, such as a light-lens system or bore scope, allows remote surfaces to be examined. More sophisticated fibre-optic equipment allows the introduction of a device into very small access holes or channels. Most of these systems provide a permanent recording of the inspection. Cameras are indispensable for visual examination as a method of documentation.

THE Applus+ SOLUTION

Expert VT technicians at Applus+ have many years of field experience in the delivery of detailed visual testing solutions and the preparation visual inspection NDT procedures and specifications. We can offer conclusions on the quality and condition of assets and equipment, as well as on welds or the welding processes used at work sites worldwide. Hard-to-reach locations may be visually inspected with indirect VT equipment such as video cameras, endoscopes, borescopes and visual inspection UAV technology.

Target customers
Visual testing is used in all industries and at every step of a component’s lifecycle. VT NDT can easily find and evaluate the following discontinuity types:

- Cracks
- Holes
- Corrosion
- Blisters
- Impact damage
- Most other discontinuities that are surface breaking or result in a deformation at the surface

**Key customer benefits**

Benefits of NDT visual testing and inspection techniques include:

- Low cost
- Portability
- Immediate results