

Visual Testing (VT)

Visual testing is one of the most common methods of non-destructive testing. Visual testing relies on the adequate illumination of the test surface and on the eyesight of the technician. Visual testing requires training (for example, knowledge of product and process, anticipated service conditions and acceptance criteria), and it has its own range of 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 simply scientific ways of enhancing the visual examination. The equipment needed is simple: for direct viewing 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 for permanent recording of the inspection. Cameras are indispensable for visual examination as a method of documentation.



The Applus+ solution

Expert Applus+ technicians and staff have many years of field experience in the delivery of detailed visual-testing solutions and the preparation of inspection procedures and specifications. We are able to 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, boroscopes and drone technology.

Target customers

Visual testing applies to all industries and every step in the life-cycle of a component. VT 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 visual testing include its:

- Low cost
- Portability
- Immediate results