

INSPECT

Imaging system for 2D & 3D real-time inspection and measurement

USAGE

- Simple and intuitive professional camera setup & control
- Touch screen immediacy
- Autonomous image archiving and management
- Live streaming for remote monitoring

CAMERA

- High quality 12 to 40 Mega Pixel image acquisition and archiving
- Multiple Virtual Pan, Tilt & Zoom (vPTZ) windowing
- Option to share raw RGB imaging directly with 2D & 3D image analytics & AI
- Optional 3D Augmented Reality overlays

BENEFITS

- Captures ultra-wide area of inspection
- Portable and easy to deploy
- Cost effective system that saves time and money by enabling real time inspection

The Observant Inspect System

The INSPECT system is a portable, single operator, high resolution, non-contact digital imaging inspection and measurement system. It can be used live or autonomously, in a wide variety of very different environments including production areas, labs and clean rooms.

The real-time INSPECT Camera and Review applications both provide multiple independently controllable digital Virtual Pan Tilt & Zoom (vPTZ) imaging views, allowing for excellent contextual understanding by providing both overview and zoomed-in detail.

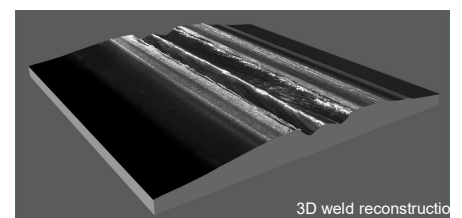
The Challenge

It is fundamentally important to have the right tools for the job. For 2D & 3D real-time inspection this includes spatially accurate and informationally rich photographic imaging which requires powerful and intuitive professional camera setup & control. An autonomous inspection system must also be able to maintain this setup, provide imaging for 2D & 3D analytics, metrology, manage rich meta tag image archiving, remote access, and monitoring.

The Solution

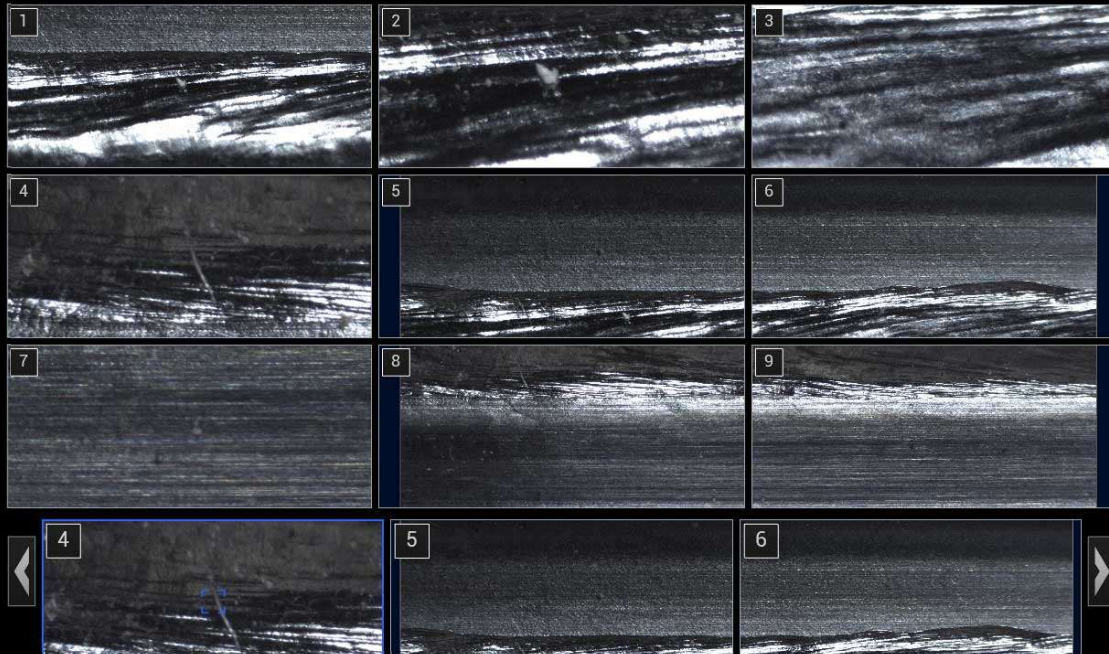
INSPECT provides operators with ultra-high-quality precision imaging using the INSPECT Camera application equipped with the latest best-of-breed GigE or USB 3.1 machine vision sensors, providing the best possible quality at the highest possible frame rates.

INSPECT, based on Observant's robust imaging platform, APERTURE, allows complete flexibility of viewing, with the ability to control every aspect of the image acquisition process. Understanding is enhanced by 2D & 3D analytics, image processing and colourisation, independent of camera imaging acquisition and archival.



INSPECT is also fully integrated with the APERTURE 3D Visualisation, 3D Surface Reconstruction and 3D Stereo viewing systems.

Observant
I N N O V A T I O N S



vPTZ Manager

Image Effects

Brightness 1.00
 Contrast 1.00
 Saturation -0.50

Configurations
 A B C D

Save Reset Increment

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INSPECT Camera Application

Continuous image acquisition and archiving allows both live and retrospective vPTZ overview and zoomed in inspection and precise measurement. Once launched, the Camera application is fully autonomous with every aspect of its functionality managed by the APERTURE platform.

INSPECT Review Application

With versatile screen layouts, powerful timeline searching and playback controls, the Review application simplifies post acquisition 2D and 3D analysis. If using a polarising camera system, it can also provide for state-of-the-art image analysis and 3D surface reconstruction and animation.

Key Information

Choice of:

- 12 to 40 MP colour and/or B&W sensor, and 5 MP Polarising sensor
- High-speed GigE or USB 3.1
- Resolution and exposure dependent framerate from 6 to 30 FPS
- 4K to 8K resolution

System includes:

- Single or continuous image acquisition and local or network archiving
- Fully configured and pre-loaded high-performance Windows 10 PC
- Integrated lighting
- Rugged IP rated camera and lighting housing

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Multiple independently controllable views allow for excellent contextual understanding by providing both overview and zoomed-in detail.