

TestRun Validation: Refine, test and verify inspection systems automatically

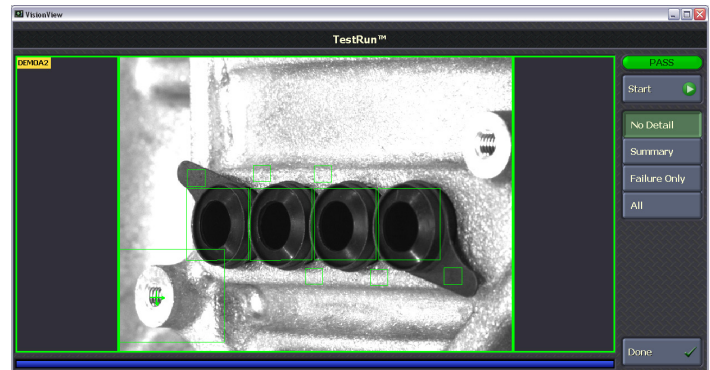
In-Sight® Explorer software includes the TestRun™ validation utility that enables users to refine, test and verify inspection systems automatically. A setup dialog simplifies test routine configuration without the overhead of extra programming. If an anomaly is detected on your line, you can use the TestRun for fast, simple troubleshooting.

Available only with In-Sight vision systems, the TestRun validation platform gives users increased confidence in the validity of their vision inspection results. Once a vision application is up and running, adjustments may need to be made due to variables such as environment effects, process updates, part or product changes. The system can ensure that any changes made to the vision program do not inadvertently cause existing jobs to fail. Operators can ensure that program changes do not break other parameters by quickly checking against the “baseline” configuration. Operators can also easily check the performance of the hardware so that any problems can be caught in test rather than during production.

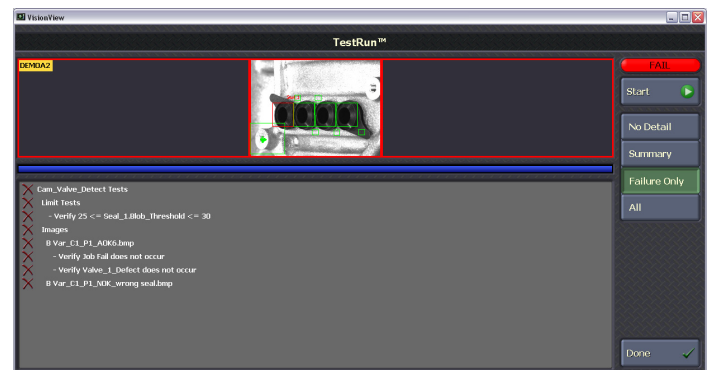
TestRun also makes it easy for system integrators and OEMs to demonstrate that the vision system meets the acceptance criteria when it is installed at the end users’ facility.

Who benefits from the TestRun validation utility?

- Machine operators can easily and automatically test the vision system and verify operation at the beginning of a shift or after a product changeover.
- Systems integrators and designers can demonstrate that the vision system meets the application requirements and expedite the validation of a system installation.
- Quality managers can identify “borderline” inspections to refine pass/fail criteria



The TestRun utility verifies the integrity of your vision application before the production line is started.



You can instantly identify and locate errors due to an operator entering out-of-spec parameters with the TestRun tests.

In-Sight® Explorer Software

Ease-of-use is built into the heart of In-Sight vision systems starting with easy-to-use but powerful vision tools and In-Sight Explorer software interface. A Microsoft Excel®-like format for the spreadsheet view provides a robust, flexible and efficient way to configure the vision tools for your application. The flexible In-Sight Explorer EasyBuilder® user environment makes applications easy to set up and deploy for any operator. The TestRun configuration tool allows the vision designer to configure and run tests for a job.

Get a free software trial from
www.cognex.com/insightexplorer

A comprehensive test routine for your vision systems

1. Limit Tests

A vision inspection program can contain many input settings, allowing an operator to modify job settings, providing flexibility for the system. When making changes it is often difficult to track how the changes in one setting might affect other tools or set parameters.

Setup: Assign pass/fail limits to setup parameters.

Execution: Confirm that the current setup parameters are within the expected limits.

2. Defect Tests

These tests are configured to make sure that the program, or “job”, that is running on the In-Sight system returns accurate inspection results.

Setup: Identify a library of “challenge” images to include examples of “good” parts and “bad” parts. Reference images of bad parts can be further graded by specific defect(s).

Execution: Evaluate each image in the library by the current vision program to confirm “expected” results.

3. Hardware Tests

Often, when a vision system stops reporting valid results, it's because something in the image acquisition stage has changed. Either the lighting has failed, the lens has become contaminated or out of focus, or the camera has been bumped out of position.

Setup: Measure the quality of the images that the camera can acquire.

Execution: Measure image integrity by checking factors such as the focus (sharpness), the field of view (position), and the illumination (brightness) of the current system.

Log files and auditing

When the tests are complete, TestRun provides details of each test in a log file. Logs create a record of the system used for troubleshooting by reviewing the state of different parameters at various points over time.

In addition, TestRun automatically generates In-Sight audit messages if auditing is enabled for your In-Sight vision system. In-Sight Audit Server lets vision system users keep close tabs on any changes in their system, further enhancing the security of the vision program.

VisionView Operator Interface

The VisionView® operator interface is ideal for monitoring and controlling systems on the factory floor—available on four platforms.



Use VisionView with the TestRun Plug-in to detect TestRun configurations and execute validation tests with a press of a button. This interface makes it easy to establish a daily or weekly test procedure with no additional programming needed.

www.cognex.com/visionview

COGNEX

Companies around the world rely on Cognex vision and ID to optimize quality, drive down costs and control traceability.

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