Vision Metrics Software

Vision Metrics machine vision Software is a product developed by Cimtec to capture and report on inspection image data. Vision Metrics software can communicate with each vision camera installed in a plant over the facility network. These results are accessible throughout the plant through an easy to use web browser user interface. The software stores all inspection images and results in a database on the network.

Inspection data in the Vision Metrics system can be accessed by any authorized user anywhere in the plant through a web-based portal. The interface allows a user to call up any camera on the network and get real time inspection information. The latest inspection image is displayed on the dashboard, so the user can watch the inspection process in real time. Vision Metrics is compatible with most major vision camera systems, including Cognex vision hardware.

Vision Metrics Software Reporting

Collecting data is only half of maintaining quality control of a product line. Analyzing the inspection data, characterizing failure modes, and finding ways to reduce failures and improve quality have to happen too. Vision Metrics software has a variety of reporting tools that are useful to everyone from machine operators through plant managers. Reporting functions within Vision Metrics are easy to set up and use. Several reports are included as standard options, such as Histograms and Pareto charts. Third party applications such as MES and SCADA systems can perform an SQL query on the database to access data within the Vision Metrics system. For quick looks, the Capture History screen includes images from all captured inspections, as well as other information such as pass/fail and failure reasons. This information can be filtered or sorted to narrow down a data set of interest.

Benefits of Using Vision Metrics

Vision Metrics machine vision software can provide a variety of benefits to nearly anyone in the production process. Integration of vision metrics into an inspection system can:

- Perform statistical analysis of up to the second data
- Characterize how upstream production failures manifest in downstream inspection images
- Alert operators to trends in product quality so that they can be empowered to quickly identify and correct production problems
- Provide images that plant managers can share with customers to confirm inspection processes
- Characterize failure modes and frequencies so problems can be addressed
- Sort data by shift, production line, or product to identify quality bottlenecks
- Increase resource efficiency by eliminating the need for operators to type in data that is also captured on camera
- Allow managers to compare the quality of a product line over time by pulling up archived images stored in the database

Cimtec's Vision Metrics software is a simple to use product that can be set up in minutes, allowing quality control engineers to start gathering data fast.