

Guardian PQV

100% PRINT QUALITY VERIFICATION



The Guardian Inspection System™ PQV model provides true 100% print quality verification, and can be installed on any type of printing press or inspection rewinder. The Guardian PQV is designed for "One-Touch" master image training to provide quick and easy setup of new jobs. After the master image is trained the system will compare every image against the master and automatically highlight defects for the operator.



PC INDUSTRIES Achieving Quality Through Technology

Guardian PQV 100% Print Quality Verification

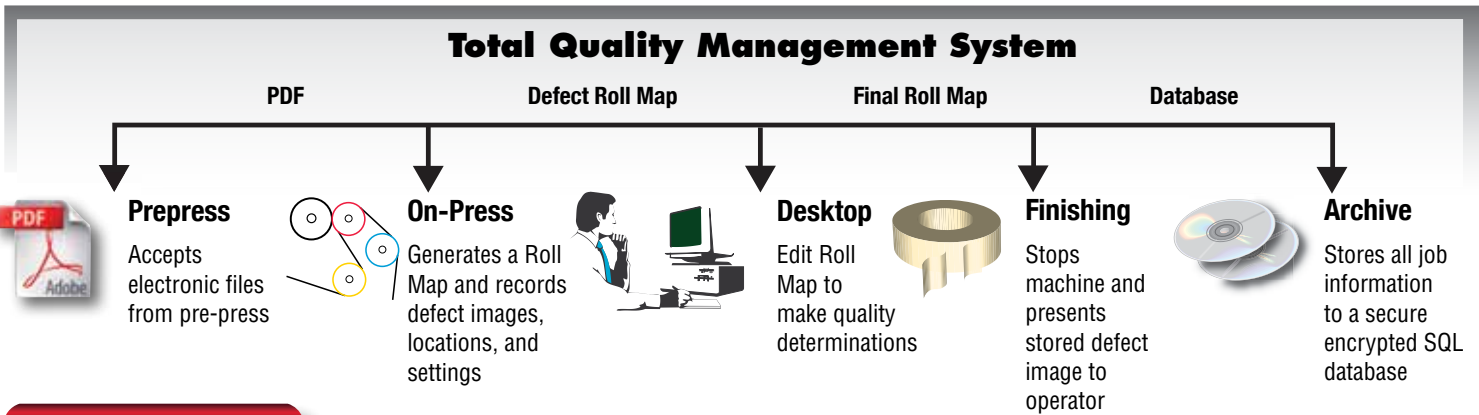
EASY TO USE



DEFINE ZONES



INSPECT



FEATURES

Secure

3 levels of security restrict unauthorized access to secure documents and sensitivity settings. Data files are password protected using 256-bit encryption.

Accurate

The Guardian PQV is capable of detecting a missing period down to a 3-point font and can detect the slightest color variations. The area scan camera option provides fixed pixel resolution, which guarantees the same minimum defect size detection capability regardless of web speed.

Fast

New job setup typically takes less than 10 seconds and the Guardian PQV will store all of the master images, sensitivity and job settings. The operator can instantly “Quick Zoom” to magnify the color-coded highlighted defect. When a defect is detected the operator can also flip to the master image to compare the differences detected.

Advanced

- “Defect Queue” displays the down web position of defects - allows operator to click and view upcoming defects
- PDF master input option
- Multiple zones with independent sensitivity settings
- Web/Sheet skew correction (web guide not required)
- Zero speed and variable speed inspection
- Warn tolerances alert operator prior to defects
- Uninterrupted inspection while presenting/displaying defects
- Unlimited defect image storage while presenting defects
- “Auto Train” text and die cut areas
- Optical Character Recognition (OCR) option
- Sequential and matching inspection option
- 1D and 2D bar code reading option
- ANSI/ISO bar code grading option
- Dimensional gauging and measurement option
- 21 CFR Part 11 compliant option
- Remote technical support and training



Defect Images in Queue: 5

Defect Queue

INTERFACE



BENEFITS

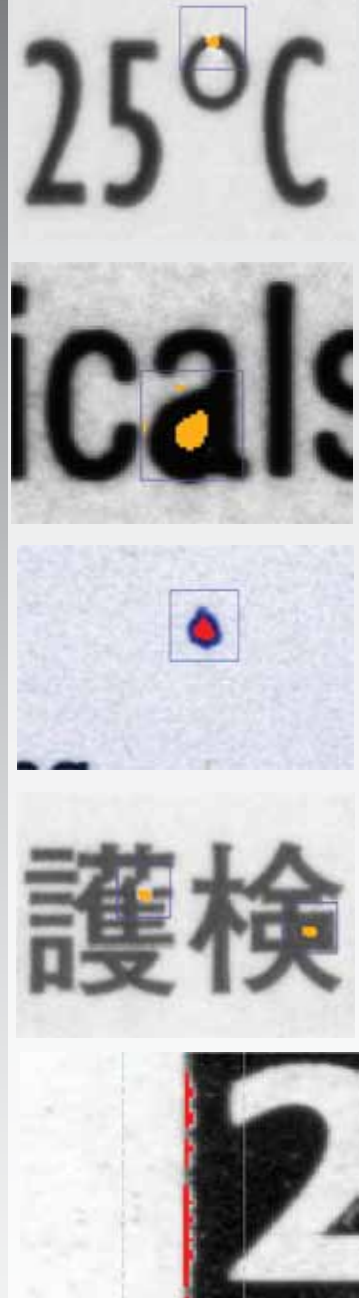
Detect Errors ...

- Initiated during PDF artwork creation
- Introduced during pre-press step and repeat process
- Created during raster image processing (RIP)
- Produced during the plate-making process
- Caused by incorrectly mounting printing plates
- Created during plate washing
- Due to press accuracy
- Related to press operation error
- Before producing costly scrap
- Prior to shipping defective product with potential liability

Types of Defects Detected:

- Missing, filled-in and broken text
- Print and die mis-register
- Unremoved or partially removed matrix
- Defects in graphics areas: logos, vignettes and process printing
- Color variation
- Ink spots, smears and streaks
- Incorrect or poor quality bar codes
- Human readable and bar code sequential errors (duplicate or missing)
- Positional tolerance errors (Die to liner, die to perforation, die to die, print to die)

Sample Defects



Guardian PQV 100% Print Quality Verification



SPECIFICATIONS

Operating System	Windows XP / Windows 7
Computer	High-performance industrial computer suitable for production environments
Remote Support Access	Via Internet or Modem
Types of Cameras	Area scan or line scan depending on application
Resolution	Up to 10 Megapixel area scan cameras and 8K line scan cameras
Camera Options	Color or grayscale
Maximum Number of Cameras	Up to 8 cameras. Available Configurations: Side by side, front and back, unwind, and rewind for re-inspection after web editing
Lighting Options	PCI-designed Xenon strobe lighting (white or black UV light) or constant solid-state lighting
Maximum Web Speed	Dependent upon web width and number of cameras
Maximum Web Width	100" (2,540mm)
Maximum Repeat Length	Unlimited
Minimum Defect Size	Dependent upon web width and number of cameras
Master File Formats	PDF, TIF, BMP, EPS, PS
Fonts	Compatible with all fonts and foreign languages
Material Types	Labels, paper, film, carton, foil, transparent
Control Outputs	Programmable dry contacts normally open/closed
Output Devices	3 Color alarm light stack (pass, warn, fail) with audible alarm, marking and flagging devices, machine jog/stop and diverters
Input Devices	Touch-screen monitor, mouse and keyboard
Machine Integration	Web-fed or sheet-fed printing presses, inspection and slitting rewinders, tabletop rewinders, inkjet, and thermal transfer printers
Power Supply	100-240VAC, 50-60Hz
Options	Mobile cart, report printer, roll label printer, bar code scanner, ANSI Grading module, Specialized Lighting module (holograms, metallized, clear labels, RFID tags)

Other Products from PC Industries:

Digital Web Inspection • Off-line Proofing • Strobe Lights • Register Controls • Bar Code Verification



Achieving Quality Through Technology

Corporate Headquarters

176 Ambrogio Drive • Gurnee, IL 60031-3373

Phone: +1-847.336.3300 • 847.336.3232 (fax)

Toll-free number: 1.800.997.1960

sales@pcindustries.com • www.pcindustries.com

Distributed by: