

FACT SHEET



DISCOVERY SmartPQ

Automatic Fast 100% Print Quality Inspection with Comprehensive HD Web Viewing.

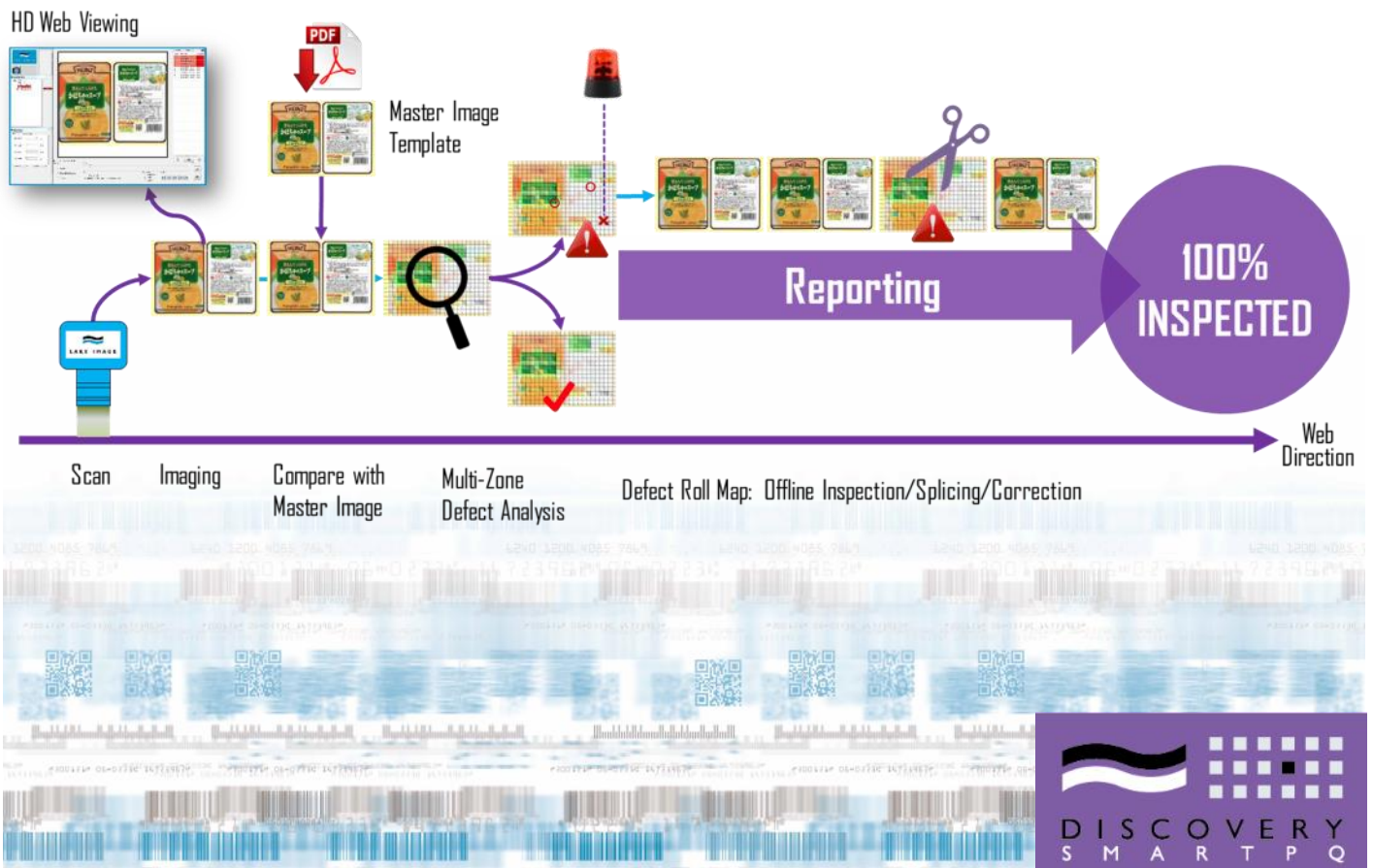
PRODUCT OVERVIEW

DISCOVERY SmartPQ is an advanced print quality inspection system tailored for web print, labels, and packaging applications. It utilizes cutting-edge technology, including high-performance line scan imaging and high-definition web viewing, to offer the following features:

- **Comprehensive Monitoring:** SmartPQ provides a comprehensive view of the entire web, allowing operators to focus on critical areas in real time, even at high speeds.
- **Reliable Defect Detection:** It instantly identifies a wide range of print defects, such as misregistration, die-cut variations, smudges, streaks, and colour variations, ensuring print quality.
- **User-Friendly Design:** The system is easy to set up, with an intelligent training mode for generating reference images. It can be configured with different sensitivity levels for various inspection requirements.

- **Efficient Defect Handling:** SmartPQ tracks and logs repeating defects, making it easy for operators to review and manage defects during or after the print run.
- **Scalable and Flexible:** It is suitable for web widths up to 1500mm (60") and offers fast performance even at high press speeds. The modular design allows for easy customization and expansion.
- **Affordable and Configurable:** SmartPQ is competitively priced and includes essential components like software licenses, cameras, and support contracts. It offers flexibility in camera options and can be upgraded with additional software tools as needed.

In essence, DISCOVERY SmartPQ is a sophisticated yet accessible solution for ensuring print quality and consistency in various printing applications. Its advanced features make it a valuable asset for businesses seeking precision and efficiency in their printing processes.



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FEATURES

Web Viewing

- Uninterrupted operation for 100% full web inspection
- Full HD quality, multi display options: View multiple areas of web at different magnifications
- Colour coded view of each defect

Defect Inspection

- Streaks, creases, smears, ink spots & voids
- Missing, filled-in or broken text & images
- Label matrix residue & die-cut / positional variations
- Print mis-registration & Colour verification (Optional)

Easily Set-up

- An intelligent, fast master image auto training
- Advanced detection sensitivity controls
- Define print areas with different sensitivity setting
- Smart scan set-up for multi-lane label replication
- PDF Compare for master image setup†

Control

- Operator Light & Audible Alarms/Warnings
- Rewinder Jog/Stop (where possible)
- Marking & flagging device - Optional

Defect History / Reporting

- Log of all print defects
- Image Archive - Optional
- Roll Mapping - Optional

† PDF Compare requires the post RIP'd Raster file

WEB APPLICATIONS

- Offset & Digital print
- Labels, Cards & Tickets
- Paper, Clear Films, Foils, Packaging & Cartons

SYSTEMS

- Input Devices
- Colour Line Scan Cameras: (2K, 4K, 8K & 16K)
- Resolution: 150 to 1200 DPI
- Triggering: High resolution encoders
- Lighting: Long life L.E.D. Optional back-light

Processor / Interface

- OS: Windows™ 10 (64bit)
- Chassis: Industrial Rack
- Power: 110-230VAC
- Approvals: CE Certified
- Interface: Touch Screen Monitor, keyboard & mouse

Performance

- Min. defect sizes: sub 0.05mm² (0.002inch²)
- Press Speeds: up to 350 meters/min (1150 ft./min)
- Web widths: up to 1500mm (60")

Installation / Integration

- On Press: Standard press mounting kits
- Rewinders: Web stability frame, web guide and path rollers available if necessary
- Remote technical support and training

† Dependent on absolute resolution available.

ADVANTAGES

- **Machine independent** - Can be retro-fitted to most existing printing and finishing equipment
- **Reliable** - 100% web HD viewing & defect reporting. Catch defects early in the print production process.
- **Flexible** - Ability to deploy broad a set of analysis options to capture a variety of defects
- **User-Friendly** - Faster set-up & logical GUI layout
- **Upgradable** - Customisable tools available for complex defect detection & variable data inspection
- **Supported** - Comprehensive maintenance contracts featuring remote diagnostics.

BENEFITS

- **Lower Costs** - Automatically capture defects before reaching unacceptable levels. Prevents costly reprints
- **Reliable Defect Detection** - Identify a wide range of defects including misregistration, colour variations, smudges and streaks.
- **Efficient Defect Handling** - Tracks and logs repeating defects, facilitating easy review and management during or after the print run.
- **Improved Productivity** - Automate labour intensive print quality inspection processes
- **Less Scrap / Less Waste** - Immediately prevent costly scrapping of large runs of defect print
- **Mitigate risks** - Ensure all jobs comply to industry regulations.

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