Helios Product Line

Advanced 100% Automatic Inspection Solution for Labels & Narrow Web
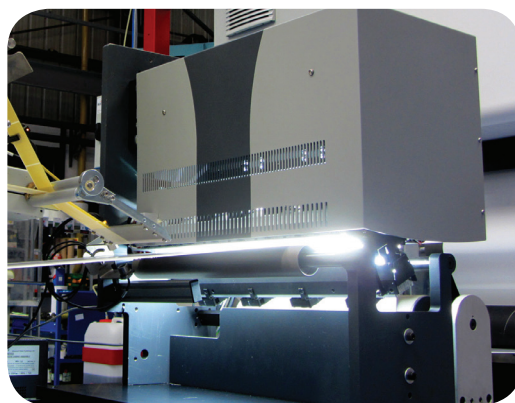
Labels

Trusted and market-proven, with thousands of installations worldwide, AVT Helios is a superior line of automatic 100% print inspection solutions designed exclusively for labels and narrow web printing. Helios supports every stage in the production process via an innovative platform that serves the widest available range of print production workflows and applications

AVT.

Built to Meet Global Market Needs

Robust 100% automated inline inspection solutions for label and narrow web printing, the AVT Helios Product Suite meets growing market demands. Helios delivers the highest available inspection resolution, making it the fastest and most accurate system in the market today. This means stringent process control and quality assurance across the entire print production process. Installable on any press or rewinder, Helios instantly identifies defects on labels as soon as they occur, reducing waste, enhancing production performance and providing 100% quality assurance.
Your print jobs are verified – from setup through printing and finishing.

AVT Helios in action

Helios Product Suite

Recognized as the leading inspection system on the market today, Helios is designed to boost inspection efficiency and pave the way towards a stronger, more reliable future in print inspection and process control.
By deploying advanced machine vision technology and image processing capabilities, the Helios platform supports current and future converting equipment, regardless of machine speed, width or technology, to deliver quality results – every time.

Market-proven, Helios solutions are installed on thousands of presses and rewinders at customer sites around the globe. Quickly and easily integrated on any press or rewinder for inline quality assurance and process control, Helios supports any type of production workflow and adheres to high quality standards. Helios effectively handles even thick embossed metalized foils, as well as highly reflective holographic foils and laminates. Robust and reliable, the various models can be easily configured to meet individual customer needs.

AVT Helios is uniquely designed to address each and every stage of the printing and production process, including various print scenarios and workflows.
The Helios Product Suite includes:

Helios R / Helios B
100% inspection that delivers the best cost-effective solution

Helios S
Supports demanding reflective and holographic, high quality applications and any production workflow
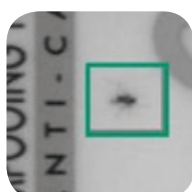
Helios S Turbo+
Combines superior inspection performance with advanced high-speed inspection needs

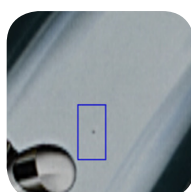### Helios S Turbo HD+
Top of the line inspection performance designed for high-end applications & features
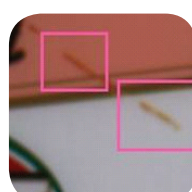

Barcode

Foreign objects

Spots

Splashes

Mis-registration

Text

Value-Added Productivity:
On-Press and Rewinder

On-Press
- Significantly reduces waste and production costs
- Detects developing defects in real-time
- Decreases reprint cases and overprinting
- Boosts overall productivity and efficiency

Rewinder
- Delivers 100% quality assurance
- Automatically stops at defect location
- Enables fast and easy roll clean-up
- Eliminates customer rejections

Changing the Face of Quality Assurance & Process Control

Powerful Inspection Algorithms
Deploys dedicated, advanced algorithms designed to detect any type of defect. Helios offers additional algorithms, including Characters, Die-cut register and Matrix removal problems to address specific label requirements.

Proven Ease of Use
Recognized as the industry's leading, user-friendly inspection system. With its quick and easy automated setup in one minute (or less!), clear and concise screen display, enhanced automation and inspection profiles – Helios is up and ready to go in zero time!

Built-in Archiving and Reporting
Equipped with an innovative, built-in PrintFlow module, Helios efficiently handles all print job and data archiving and reporting. Operators use in-line reporting to review job/order/roll reports, edit and export final reports to digital files, or print reports for subsequent material handling. Quality reports with detailed defect images help operators identify problem areas and are used for process improvements and downstream roll cleaning.
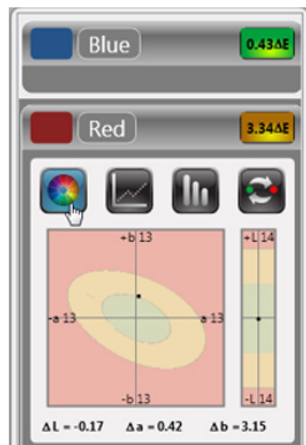
Any Substrate - Any Application
Designed to work seamlessly on any application and substrate - from food and beverage to pharmaceutical, label stock to transparent film, or on any highly-reflective foil.
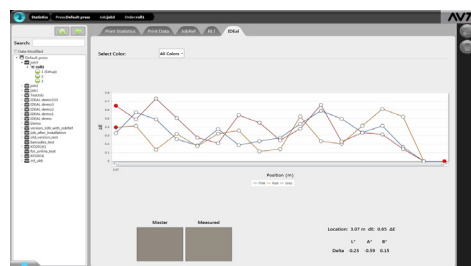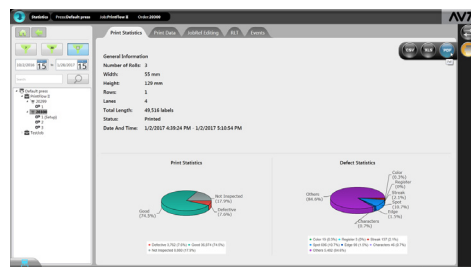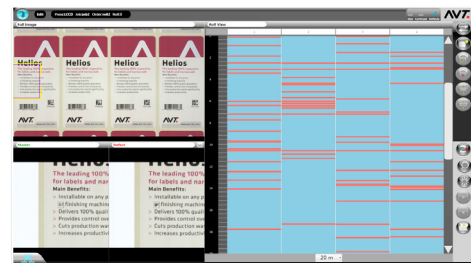
In-Line Monitoring Tool
Efficient built-in tool reports total good material printed, informing the user of the exact amount deployed. This ensures only this amount is printed, avoiding costly re-prints and over-printing.

End-to-End Workflow Solutions
The Helios Produce Suite is uniquely designed to address each and every stage of the printing and production process. The system quickly and efficiently detects 100% of the defects in real-time, controlling the entire printing process, preventing customer rejection on all your print jobs.

Color measurement

Inspection statistics and quality reports

Optional Modules

The Helios Product Suite offers a wide range of optional add-on modules that enable the system to meet and exceed customers' fast-growing needs and requirements.

MasterRef

Enables printers to save a master image of each job, later used to verify that repeat jobs are identical to the original, preventing production errors and reducing waste

JobRef

Enables verification at the set-up stage by automatically comparing the job to the original, customer-approved digital PDF file

IΔeal

In-line Delta E color measurements anywhere on the image, performed during and in parallel to print inspection, displays graphical view of color differences and reports statistics

RLT (Repeat Length Trend)

Enables monitoring/alerts on repeat length changes

Reflective Support

Enables inspection/detection of defects on all reflective materials and inks; maintaining the same high quality standards for diffusive/reflective parts

Clear-on-Clear

Enables easy/accurate defect detection deploying a unique backlight mechanism to illuminate transparent/semi-transparent web

Barcode Verification

100% verification of printed barcodes; checks/alerts for barcode decoding, quality and ANSI grading

Barcode & Variable Data Verification

100% verification of 1D/2D variable barcodes, including readable human codes; all codes are inspected/verified against a database, alerting on readability, quality, missing codes, duplications and sequence

WorkFlow Link

Transfers quality data from the press to the rewinder for efficient removal of defective material; automatically stops the rewinder at the defect location

Offline Setup

Standardizes inspection results, enhanced setup consistency and suitability between operators, as all settings are made by the same operator for all AVT inspection systems on one offline station

Print Flow Manager ll

Collects PrintFlow data from all AVT platforms with easy, remote access for managers/key personnel directly from their desktop PCs

PrintFlow Central

Central automatic storage of job data and roll reports; supports central backup of all data, enabling continuous availability of inspection data for PrintFlow Manager/Workflow Link

ProMIS

Enables bi-directional communication with MIS (ERP) systems in the print production environment for simple, quick and secure set-up processes

Press Link

Records press events in the PrintFlow reporting database for overall process enhancement, quality assurance and downstream cleaning

SpectraLab

In-line, ISO standard, dual-beam spectrophotometer measures color in dedicated color patches/targets and in image areas for absolute, accurate L*a*b*, Density, and Dot Gain measurement and enhanced reporting and real-time process control/alerting

Digimask

Deploys PDF die-cut line to mask-out irrelevant areas surrounding the package

Dual Mode Display

2 x 24" displays with enhanced viewing options

Label Inserter/Ejector Interface

Automatically triggers any marking/ejecting device to mark or eject defective area in the printed material

www.avt-inc.com   The Printer's Choice | AVT.