Helios Product Line

Advanced 100% Automatic Inspection Solution for Labels & Narrow Web



Trusted and market-proven, with thousands of installations worldwide, AVT Helios is a superior suite 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.



AVT Platforms Meet Global Needs

Robust 100% automated inspection solutions for label and narrow web printing, AVT Helios meets and exceeds growing market demands, delivering stringent process control 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!



Helios installation

End-to-End Workflow Solutions All in One Package!

The Helios solution suite is uniquely designed to address each and every stage of the printing and production process. The systems quickly and efficiently detect 100% of the defects in real-time, controlling the entire printing process, preventing customer rejection on all of your print jobs.

Helios Turbo HD

Recognized as the leading inspection system on the market today, Helios Turbo HD is designed to boost inspection efficiency and pave the way towards the future of print inspection and process control.

Using cutting-edge machine vision technology and image processing capabilities, Helios Turbo HD is a ultra-powerful platform that supports current and future converting equipment, regardless of machine speed, width or technology, to deliver quality results - every time.

Helios S / Helios S Turbo

Market-proven solutions, Helios S and Helios S Turbo are installed on hundreds of presses and rewinders at customer sites worldwide. Quickly and easily integrated on any press and rewinder for inline quality assurance and process control, Helios S and Helios S Turbo support any type of production workflow and quality standards. Robust and reliable, the systems effectively handle even thick embossed metalized foils, as well as highly-reflective holographic foils and laminates.



Streaks









Mis-registration

Text

Foreign objects

Spots



Splashes

Value-Added Productivity: On-Press and Rewinder

On-Press

- Significantly reduces waste and production costs
- Detects developing defects in real-time
- Decreases over-printing/re-printing
- 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!

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.

One System Does it All

Available with a wide range of add-on modules. Helios supports diverse functions throughout the printing process.

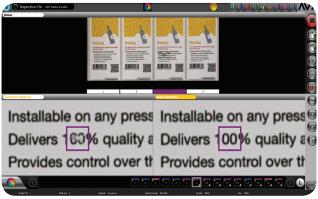
With a fully-upgradeable configuration, the system is built to meet the growing needs of every customer.

Built-in Archiving and Reporting

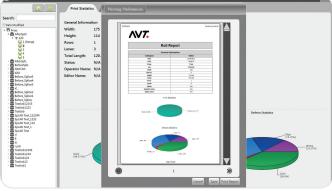
Equipped with an innovative, built-in PrintFlow module. Helios efficiently handles all print job and data archiving and reporting. Operators use in-line reporting to review job/order/roll reports, edit and export final reports to digital files, or print reports for subsequent material handling. Quality reports with detailed defect images help operators identify problem areas and are used for process improvements and downstream roll cleaning.

In-Line Monitoring Tool

Efficient built-in tool reports total good material printed. Helios in-line monitoring tool informs customers of the exact amount of good material printed. This ensures that the precise amount is printed, avoiding costly re-prints and over-printing.



100% inspection - simple, easy to use application



PrintFlow II production statistics & quality reports



Optional Modules

Helios offers a wide range of optional, add-on modules that enable the system to meet and exceed customers' ever-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

I∆eal

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 trend 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 II

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

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

The Printer's Choice



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