Complete Solution—full, dual-side processing and inspection configuration

Complete Solution—simple, single-side processing and inspection configuration

A *complete* stand-alone solution for inspection, defect management, quality control, numbering and barcoding

Baldwin Vision Systems delivers your ideal, highly customized solution—modular, flexible, and expandable to meet your current needs and future requirements.

Complete Solution

Our "Complete Solution" is a modular, stand-alone production line where pre-printed or unprinted security products can be inspected at high speeds—on one side or both sides of the substrate. Identify and track the smallest of defects, then have them removed automatically to prevent faulty product from getting into your customers' hands.

Available components include sheet or web transports, inline print inspection, inkjet printing of variable data (serial numbering, barcoding, etc.), variable data verification, ultraviolet/infrared (UV/IR) printing, ink curing and drying, covert feature verification, defect management, real-time process monitoring and reporting...and more.

Baldwin Vision Systems manufactures the most reliable, advanced security inspection technologies in the industry. As the leading experts, we've sought out and established partnerships with top complimentary technology companies to deliver a complete, stand-alone solution that precisely fits your specific requirements. For you, this means having a single source for your ideal solution—rather than having to communicate with or commission multiple suppliers.

Stability and long-term support

Baldwin Technology Company has served the print industry for 100 years, has performance-proven technology installed in more than 100 countries, and maintains a global network of sales and service operations.

Our parent company, **Barry-Wehmiller,** is $3 billion global supplier of manufacturing technology and solutions serving a diverse platform of industries—packaging, paper converting, sheeting, corrugating, engineering and IT consulting.

As part of the Barry-Wehmiller network, **Baldwin's Vision Systems** segment provides a deep well of resources from one multinational organization. Our sister companies **AMS Spectral UV** and **BW Papersystems** bring specialized knowledge to the design of your customized Complete Solution. Our access to deep resources is combined with attentive, personalized support from dedicated team members, who add value by forming long-term relationships.

Applications

A customized Complete Solution can be tailored for web or sheet applications processing the most challenging special substrates, security foils, security threads, fibers, special inks and many other security features. Our modular approach results in a highly optimized integration of systems for printers working with:

- Banknotes/currency
- Revenue tax stamps
- Postage stamps
- Substrates
- Passports
- Lottery tickets
- Checks
- Legal documents and certificates
- Brand protection labels and packaging
- Credit, phone and ID cards
- and more...

Feeders	Vacuum Transports	Inspection	Inkjet Printing	UV Curing IR Drying	Reject Gates & Bins	Sheet Stackers	Real-Time Monitoring & Reporting
roll or sheet	top or bottom	print quality variable data security features					

Modular, flexible

By working with one company, you can rest assured that your configuration will fit your specific requirements perfectly. The entire process from time of purchase through project management, integration and installation will be hassle-free. Because of our partnership agreements with well-established, performance-proven manufacturers, we're able to deliver the industry's most advanced automation technology for a fast return on investment.
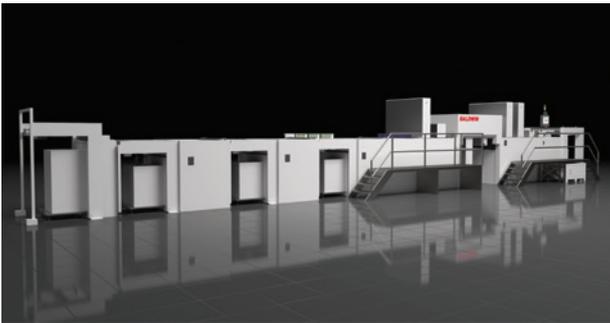
Transports

Faster sheet/roll transport and handling components lead to a more efficient, automated printing and inspection operation. Compared to transports using gripper technology, our solutions utilize speedier, more flexible and precise vacuum/belt technology. Accurate, fast operation means more throughput, more jobs, a better bottom line. Our modular approach is highly adaptable for meeting current needs and setting you up to adapt to changing requirements. Transport configurations can be single-or dual-sided, sheet-to-sheet, roll-to-sheet, or roll-to-roll.

Inkjet Printing

For numbering, barcoding, and customization, our inkjet technologies provide a wide range of compact high-performance printing options—perfectly suited for printing of variable data on security print products. High speeds, accuracy, and very compact size makes them ideal for integration into existing production lines or presses. Inkjet solutions are available for single line, full width, low- or high-density, aqueous/solvent/UV-curable inks, standard or high resolution up to 1200 dpi, multi- or single-color print, overt, covert, and special inks.

UV Curing / IR Drying

Our print curing and drying systems are designed for the unique and challenging requirements of security print applications. Available LED-UV modules use the most advanced programable LED chip arrays available and provide the industry's highest curing intensities. The snap-on/slide-in expandable architecture easily adapts to any machine. Specific areas on the printed product can be targeted for curing, with the light turned off for areas where it's not needed. The 100% liquid-cooled housings ensure the lowest possible curing temperatures, and the rugged, maintenance-free design is performance-proven in industrial environments.

Inspection

The **Guardian PQV 100% Print Inspection** from Baldwin Vision Systems provides complete print quality verification, ensuring the elimination of every defect from your workflow. The feature-rich inline system inspects 100% of the web or sheet width, 100% of the time, at high press speeds. It's designed from the ground up to perform to the most rigorous inspection requirements, providing optical-based print inspection and variable data verification without fail.

Inspection (continued)

Guardian PQV is available with either conventional line-scan camera technology, or with the latest Contact Image Sensor (CIS) technology. Inspect single side, dual sided top and bottom inline, dual-sided top and bottom offset. *Inspection capabilities include:*

- Multiple inspection tasks in one system
- Inspection algorithms for security print including Intaglio, Offset, Screen, and more
- Serial numbering and character inspection and verification (OCR & OCV)
- 1D and 2D barcode inspection and ANSI/ISO Grading
- Dimensional gauging for registration and other measurements
- UV fluorescent feature and fiber inspection
- IR covert feature inspection
- Inspection of optically variable devices (OVD) and optically variable inks (OVI)
- Color and density inspection
- Micro-perforation inspection
- Watermark and security thread inspection
- Microprint inspection
- Magnetic properties inspection
- Substrate inspection
- Defect mapping, tracking and reporting
- Secure audit trail
- **Guardian PQV 100% Print Inspection** and **Defender 100% Inspection** (wide web) technologies can be retrofit to your existing platform.

Monitoring and Reporting

With the **Guardian RTM Real-Time Monitoring** data-connecting technology, you can track and compare many different production metrics. Press managers can monitor changes as they happen, and make highly informed decisions about print quality, defect management, and even operator-to-operator performance. Guardian RTM uses a central server to monitor, collect, and display real-time inspection data on a simple, uncluttered dashboard. RTM can simultaneously collect data for multiple presses, jobs, and even across multiple plants. With Guardian PQV 100% Inspection, the combination of technologies ties together how you manage your processes, your print customers, and even your people. You're empowered to quickly identify any mechanical issues, process inefficiencies, or even tailor your operator training to eliminate defects. Quickly create reports from all connected Guardian PQV systems with the Report Generation tool. Export to multiple file formats: PDF, XLS, XLXS, RTF, DOCX, MHT, HTML, Text, CSV, Image.

Other Available Components

- Coating systems
- Cleaning systems
- Surface treatment systems
- Anti-static systems
- Pallet handling systems
- System control center equipment
- Defect tagging or flagging
- Defect ink-based marking systems
- Track and trace integration
- Internet 4.0 data integration
- Crash numbering systems
- Laser printing systems
- Laser cutting and perforating systems

More Features and Benefits

- **Work with one source,** the same source for every step: Assessing your needs, designing an ideal solution that meets your requirements exactly, installation, and training.
- Submit a **single Purchase Order** for the Complete Solution.
- The Complete Solution is **modular and flexible,** enabling you to meet today's needs and adapt your capabilities to ever-changing requirements.
- Features can be added as your business grows, providing a **future-proof investment.**
- Process **large sheet formats** at speeds up to 12,000 sheets/hour, **medium and small sheet formats** at more than 12,000 sheets/hour.
- Capable of processing **a wide variety of substrate materials and substrate weights.**
- **Monitor and prove your quality performance** by automatically tracking production metrics in real time. Reduce machine downtime by automatically monitoring production.
- **Use detailed performance reports** to improve production processes and provide traceability. Ensure that your print quality is continuous and measurable.
- **Technologies designed for ease-of-use** reduce the need for operator training, minimizing the problem of press staff turnover.
- Ensure and verify the delivery of **perfect print quality**—and **prevent defective product** from getting into your customers' hands.
- **Financing is available** through our larger parent organization. Barry-Wehmiller Companies is a global supplier of manufacturing technology and services.
- **Fast return on investment**
- **24/7/365 Helpdesk technical support**