

CORRUGATED SOLUTIONS



***AUTOMATE AND ENHANCE
YOUR PRINTING PROCESS
WITH INTELLIGENCE***

BALDWIN[®]
Unlocking Your Potential

BALDWIN is the world's leading provider of process automation and enhancement equipment for high-graphics corrugated printing.

WHO WE ARE

Baldwin's products are used by high-graphics corrugated printers across the globe to automate common cleaning tasks, as well as for curing and drying of inks or coatings as part of print-production processes. We also provide consumables (such as cleaning detergents), parts and aftermarket service, making Baldwin a single-source solution for your cleaning, drying and curing needs.

Baldwin manufactures a full portfolio of capital equipment and related consumables that help printers achieve better results every day. All of our solutions work perfectly in tandem with presses, whatever their make, and our expert team will ensure that your investment provides the expected return in operational efficiencies.

A GLOBAL FOOTPRINT

One of the greatest assets of Baldwin as a partner in your business is our global footprint: with 21 facilities in 10 countries, we have an international service-and-support presence that offers our customers unmatched assurance that they will be taken care of when they invest in our equipment.

A STRONG 100-YEAR HISTORY

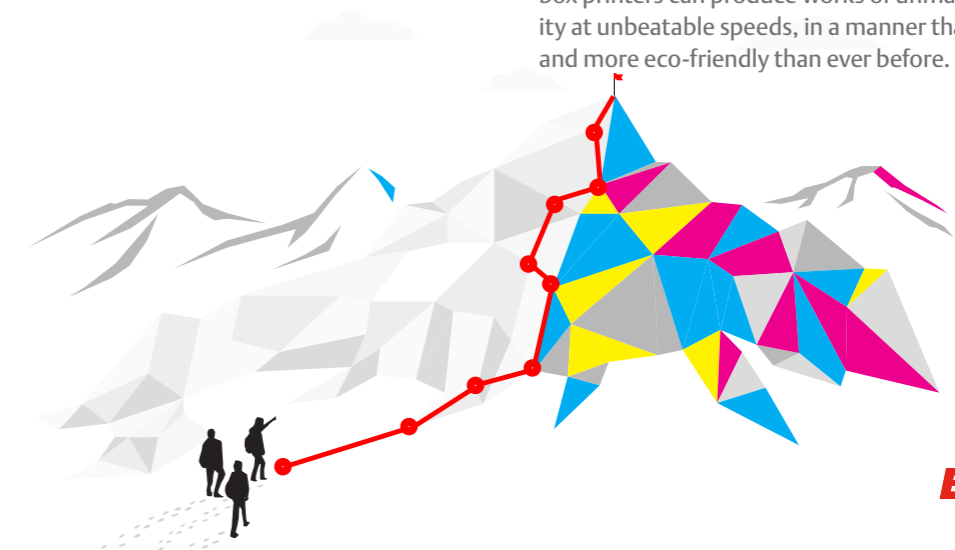
With more than 100 years' experience building equipment for printing presses, it is impossible to find another manufacturer of allied equipment for printing that can match Baldwin's pedigree.

The company was founded in 1918 by William Gegenheimer, who invented the Baldwin Press Washer, the first automatic press-cleaning system of its kind.

Through decades of growth, which involved the acquisition of a number of companies that furthered Baldwin's technology and capabilities, the company established itself as a trusted partner to members of the printing industry by providing equipment that reduces cleaning time, increases production speeds and creates better overall end-product quality.

UNLOCKING YOUR POTENTIAL

Baldwin's vision statement is "unlocking your potential," which speaks to our equipment's ability to improve your processes by employing our advanced, reliable technologies. With our cleaning, drying and curing systems in place, high-graphics corrugated box printers can produce works of unmatched quality at unbeatable speeds, in a manner that is safer and more eco-friendly than ever before.





BALDWIN offers an array of automation and print-enhancement technologies that help printers produce higher quality work better, faster, more safely and smarter.



FASTER TURNAROUND TIMES

Our automation and enhancement technologies lead to faster production times by making it so your press can run more quickly, and with fewer stops for maintenance and cleaning. With these advantages, printers who use our technologies achieve unmatched production speeds.



A SAFER PRESSROOM

By automating common cleaning tasks, our systems make it so your operators are not exposed to some of the more dangerous situations that occur when working with printing presses. Additionally, much of our equipment helps you keep your pressroom cleaner, which improves environmental safety. With the push of a button, you can safely clean your press.



MORE ECO-FRIENDLY PRINTING

Baldwin's solutions help printers use less electricity and water - two key benefits of installing our technologies. As a company that understands that printing has a major impact on the environment, we strive to offer solutions that make your carbon footprint smaller.



HIGHER-QUALITY RESULTS

Printers seeking higher-quality end results can turn to our solutions to improve their work. We offer solutions that remove hickeys, eliminate marking, improve curing results and provide the most stunning color possible with the drying process. We serve some of the most meticulous printers in the world, and help them achieve results that stand out in the market and drive their businesses.

WHAT OUR CUSTOMERS SAY:

“We are very excited to have Baldwin’s FlexoCleanerBrush™ system installed on our new Göpfert Ovation press ... it has dramatically reduced our total plate washing time and allows us to pull the plates off the press at the end of run without any additional cleaning. Our operators are also utilizing the hickey picker function during runs, which has increased our overall throughput. This new system is allowing us to provide a higher-quality product to our customers and has eliminated a lot of downtime associated with cleaning plates during and after a job is completed.”

- Scott Wilcox, Advance Packaging

BALDWIN provides cleaning, drying and curing equipment to corrugated printers that enables unparalleled environmental and operational efficiencies.

CLEANING SYSTEMS

Baldwin manufactures two leading solutions for cleaning high-graphics presses running corrugated materials - the FlexoCleanPick™, and the FlexoCleanerBrush™.

When it comes to cleaning technology, these solutions automate common cleaning tasks like hickey-picking and end-of-run cleaning. The inspiration behind these technologies is press operators themselves - Baldwin has historically strived to make the press operator’s job easier and safer, and our technologies do just that.

UV CURING SYSTEMS

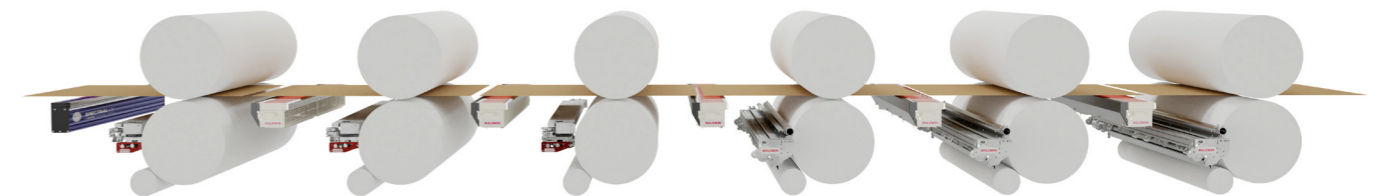
We build UV curing systems that are primarily used to cure coatings as part of the corrugated printing process. Our reliable designs are known for providing exceptional curing, which leads to more brilliant appearance of coatings.

IR DRYING SYSTEMS

With more than 10,000 installations, Baldwin is one of the the printing industry’s leading suppliers of IR drying systems that safely, efficiently and effectively dry inks onto corrugated substrates.

LED CURING SYSTEMS

LED-UV curing is a newer method of curing inks and coatings that uses light-emitting-diode “chips,” instead of mercury arc lamps, to solidify inks by exposing them to ultraviolet light. LED-based curing requires special inks, and offers a host of benefits over more conventional printing methods than many in the high-graphics corrugated printing industry are still learning about. Baldwin manufactures its X Series™ line of LED curing equipment via its dedicated division, AMS Spectral UV - A Baldwin Technology Company.



Cleaning Systems

FlexoCleanPick™ | FlexoCleanerBrush™

THE FLEXOCLEANPICK™ SYSTEM

The FlexoCleanPick™ system from Baldwin is an industry-leading solution that directly and automatically cleans the flexographic printing plates that are used to apply ink to corrugated substrates.

Each system includes a “roll cleaner” at each print station that quickly removes the bits of dust, cardboard and other foreign matter that cause hickeys* and lead to cleaning-related downtime, using a roll cloth that can last weeks before needing to be replaced.

While the press is in operation and printing, a traversing cleaning head moves across the width of the plate via operator controls to a defined position for light cleaning whenever required, which effectively removes hickey-causing contaminants. Multiple cleaning modes are available to suit different needs – a continuous mode offers consistent cleaning, while an operator-controlled intense spot-cleaning mode is available for the most difficult-to-remove debris.

With the FlexoCleanPick™ system in place, press operators no longer need to stop printing and enter the press to clean debris off plates manually before re-inking – the press can run smoothly, without interruption, and with hickey-free print results.

The roll cloths used by the FlexoCleanPick™ system are the widest available for this application on the market, which makes it easier for operators to hickey-pick because they do not have to be incredibly precise when determining the location on the plate that requires cleaning.

PRINT DEFINITIONS

Hickey: Any printing defect caused by a particle either of paper or other source of debris attaching itself to the printing plate, or other image-carrying surface. Debris produces either a blank, unprinted spot in a printed area or a solid printed area ringed by a blank unprinted area.

THE FLEXOCLEANERBRUSH™ SYSTEM

In addition to a hickey-picking function, the FlexoCleanerBrush™ offers the ability to do end-of-run cleaning in less than four minutes – delivering clean and dry plates automatically, without the need to manually clean plates in any way.

In operation, the operator turns on the FlexoCleanerBrush™ cleaning cycle after a print run is completed. A cleaning station installed at each print unit uses a brush that runs the full width of each printing plate, paired with a precision spray application system, to perfectly and evenly distribute a soap-and-water mixture across the plate as it spins, cleaning its surface.

After the ink is removed from all plates on the press simultaneously via a compact drainage system, a hot-air-based drying cycle runs across all units, resulting in perfectly clean-and-dry plates in less than four minutes.

The FlexoCleanerBrush™ system offers many benefits to printers: for example, it eliminates situations where ink dries on plates, thus removing the chance that plates will be damaged when being scrubbed and cleaned by hand. The system also uses much less water than traditional plate-cleaning methods – printers can see a reduction of up to 80% in their water waste after installing the FlexoCleanerBrush™. The brushes used by the system are extremely low maintenance and can last five years before needing to be replaced, and the only consumable required for operation is a simple cleaning detergent.

Additionally, because plates are cleaned while they are still on the press, the whole pressroom remains cleaner in general once the system is installed.



the FlexoCleanPick™ automatically removes debris that causes hickeys from printing plates



the FlexoCleanerBrush™ automatically cleans plates while they are still on the press



>> scan to watch VIDEO

IR Drying Systems

FlexoDry™

FLEXODRY™

Baldwin has more than 40 years of experience developing IR and hot-air drying solutions for industrial applications. Our latest development, the FlexoDry™, is an ultra-efficient drying system for corrugated flexo. It is designed to enable high-quality printing while delivering significant productivity gains.

Developed to maximize your press throughput and reduce energy consumption, the FlexoDry™ system utilizes Diamond-IR™ lamps, which focus the powerful IR radiation directly at the board, maximizing efficiency and boosting production speeds. When compared with traditional systems using standard IR lamps with flat-sheet metallic reflectors, converters can increase their line speed while maintaining high-quality printing or they can reduce energy consumption by up to 30% with the same drying performance.

The unique Integrated Hot Air knife found on the FlexoDry™ utilizes internal heating elements and fans to boost the surface drying effect by wiping away moisture found on the board surface. Combined with the deep penetrative drying power of the Diamond-IR™ Lamps and the industry's first fully integrated hot air knife (with no ducting), the FlexoDry™ enables full-speed printing and finishing in a single pass.

Revolutionary Intelli-Sense™ automatic board temperature control employs smart sensors to automatically modulate IR dryer intensity. Taking temperature readings every 10 milliseconds, the Intelli-Sense™ system will automatically vary drying intensity to provide optimal results at different press speeds and ink coverages. This eliminates the requirement

for manual input and dramatically reduces power consumption.

A host of intelligent and smart safety controls ensure maximum operator safety during production. The Guardian Light™ curtain, Visi-Assist™ and Air Cushion™ technology are some of the protective safety features that ensure operational hazards are mitigated against and don't impact process safety.

As with all Baldwin solutions for flexo corrugated, the FlexoDry™ system can be retrofitted onto existing presses or equipped as part of a new machine installation. Working together with all major OEMs, the FlexoDry™ system can auto-adjust to current print width as well as interlock with all major safety-run signals. In some situations, for complete OEM integration, the touchscreen controls can be embedded in the machine HMI for seamless operation.

DIAMOND-IR™ LAMPS

Unlike styles that use industry-standard reflectors, which waste energy, our Diamond-IR™ lamps use a unique type of ceramic reflector that directs all light to the substrate, resulting in 30% energy savings when compared with other IR lamps.

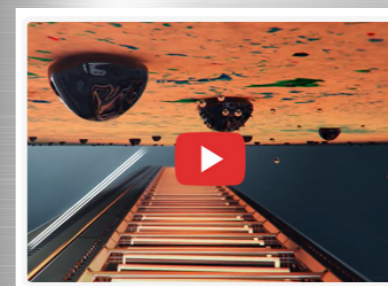
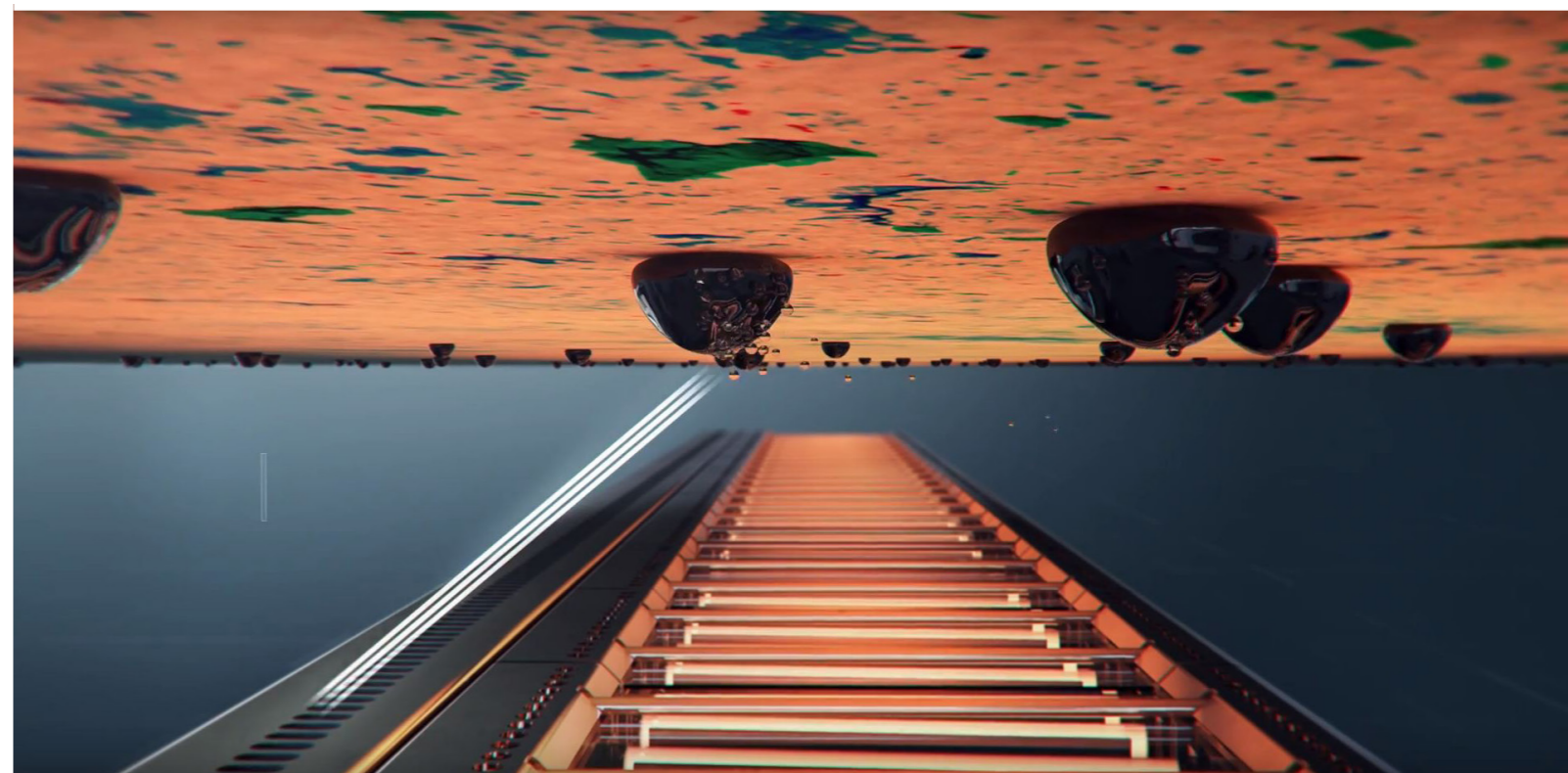
This can result in a savings of tens of thousands annually on a 115" seven-color machine.

PRINT DEFINITIONS

Infrared (IR) drying: A method of drying inks and coatings that uses infrared radiation to remove water from inks and coatings, drying them via heat and evaporation



the FlexoDry™ system offers a resilient, energy-aware solution to dry inks



>> scan to
watch VIDEO

UV & LED Curing Systems

Quadcure™ UV | X Series™ LED

QUADCURE™ UV

A reliable and efficient mercury-arc-lamp-based UV curing system, Quadcure™ is ideal for printers looking to achieve maximum curing of coatings with minimal power consumption.

Each system is designed to make lamp changes easy, and an array of upgrade options are available, including a low-heat option.

Top and dedicated side reflectors help Quadcure™ lamps securely cure from varied distances, and a single quick-release plug for the power and control system simplifies operation.

This system is ideal for high-graphics curing applications that require a heavy-duty solution with an elegant and ergonomic design.

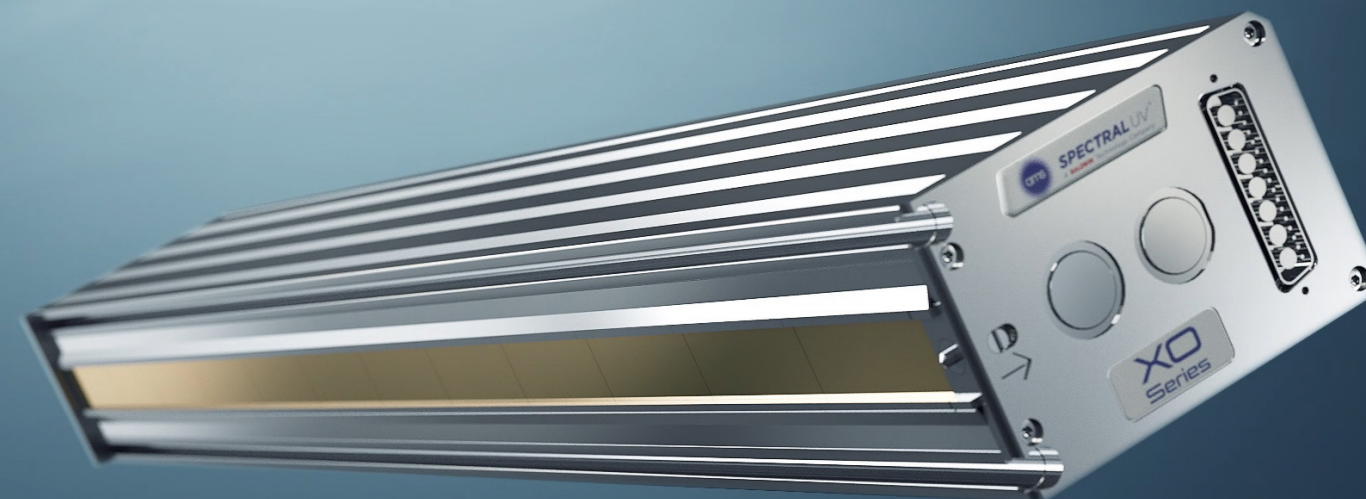
X SERIES™ LED

The X Series™ line of LED curing systems is the world's #1 choice for commercial printing and industrial curing situations that require a flexible and resilient curing solution at power densities of up to 42W/cm².

Our X Series™ modules are built by expert technicians and feature premium LED chips and bespoke industrial power electronics, all housed in compact robust housings. Unique patented LED arrays and optics ensure totally uniform light output and no gaps in curing.

The X Series™ is ideal for the highest speed curing situations that require consistent maximum intensity to the substrate. In high-graphics corrugated printing, LED technology is primarily used to cure coatings or inks on non-absorbent substrates. Width switching and individual segment control all come as standard.

All X Series™ systems offer universal t-slot mounting rails, and are available in standard wavelength options between 340 and 405nm.



the X Series™ LED curing module is a low-energy solution for curing coatings

ONE COMPACT UVed™ LED ENGINE



INTERCHANGEABLE OPTICS

PRINT DEFINITIONS

Ultraviolet (UV) curing: A photochemical process in which high-intensity ultraviolet light is used to instantly cure or dry inks and effect coatings, using light instead of heat and evaporation to solidify them onto substrates



>> scan to watch VIDEO

Aftermarket Service & Support

CONSUMABLES & PARTS SUPPORT

To best support our customers, Baldwin offers all the consumables needed to use and maintain our equipment. This includes the detergents that are used by our cleaning systems, the bulbs used by our UV curing systems, and more - additionally, we supply spare parts for all of our equipment, so you can work directly with us to ensure your system stays in perfect operational condition.

TECHNICAL SUPPORT & FIELD SERVICE

We maintain a professional staff of technical support and field-service personnel to ensure our customers have access to the help they need, when they need it. With our international footprint, our global structure enables us to offer unmatched service and support, a key differentiator between Baldwin and its competitors.

WARRANTY PROGRAMS

We fully back the equipment we build, and support our systems with comprehensive warranty programs. All new systems are warranted to provide our customers assurance when purchasing from us, and extended warranty programs are available for those who want to incorporate regular service and maintenance of their equipment into their operations.

IOT-BASED SYSTEM MONITORING OPTIONS

Many of our technologies feature IoT (Internet of Things) integration, meaning they can be connected to live real-time data collection peripherals so that system performance can be better monitored and maintained.

