



# PRINT DIGINOMICS:

Calculating the True Cost  
of Owning a Digital Press

**HD**  
**HEIDELBERG DIRECT**  
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# Going—and Being—Digital



**Business is rapidly changing, and printing and packaging companies like ours are not exempt from it.** Although long runs still make up the bulk of our work, we are handling more and more requests from our customers for smaller quantities and variable-data printing. We've equipped ourselves accordingly.

TCG Legacy installed its first digital press 25 years ago. Even then, it was clear to us that we would need digital capability to supple-

ment our offset litho and flexographic production. Digital printing has evolved considerably since that time, and so has our need for digital presses that can keep up with our strict requirements for quality, productivity, and operational efficiency.

Investing in a digital press is not a simple decision. We spent more than six months researching our most recent purchase, visiting installation sites and vendors' demo rooms around the country. We finally found everything we wanted in the Linoprint CP from Heidelberg, a press that enables us to embrace our customers' needs for variable short run printing, packaging, and labels.

A digital press needs to be a workhorse if it's going to fit into our company's round-the-clock production routine. That's exactly the kind of performance we are getting from the Linoprint CP, and at a significantly lower price point than anything we could achieve with older digital equipment. As a commercial and packaging printer, we appreciate the fact that it can process stocks up to 18 pt.

thick at high speeds. Above all, the print quality has been outstanding.

We're using our Linoprint CP to produce labels and many other kinds of work on substrates from board stock to plastics and synthetics. This press also lets us serve customers who want short run, personalized packaging for test-marketing to small groups—an application that we see as an important growth opportunity.

Digital presses have come a long way. They're heavy-duty pieces of production equipment that have what it takes to hold their own with offset and flexo presses in packaging environments like TCG Legacy. We're proud to partner with Heidelberg in making the right choice of digital equipment for this key segment of our business.

**Bob Price,**  
**President**  
**TCG Legacy Printing & Packaging**

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## Social Media

# Heidelberg Puts New Emphasis on Social Networking

**The Pew Research Center reports that nearly two-thirds of American adults (65%) now use social media.<sup>1</sup>** In a short time, these online and mobile tools have become indispensable to the way we communicate—and do business.

For the benefit of its customers, Heidelberg is keeping up with the trend with an expanded set of social media resources. These channels provide a 24/7/365 window onto everything the company offers for making the most of its solutions and services. As a supplement to more traditional communication methods, these social media channels will enable customers to stay on the cutting edge of what's new at Heidelberg USA in addition to being able to pose questions to their experts and engage in discussions with fellow users. Together, they'll bring a new degree of connectedness to the already vibrant Heidelberg user community.



**Hilary Rowser**

The newest addition is Heidelberg's presence on LinkedIn, the preferred social network for business professionals. Here, regularly updated content will focus on improving productivity, operational efficiency, and ROI.

➔ [www.linkedin.com/company/heidelberg-usa](http://www.linkedin.com/company/heidelberg-usa)

One of the best ways to stay in touch with Heidelberg is to follow @HeidelbergUS on Twitter. Watch for live Tweets from Heidelberg events like the open house at Print Media Center Atlanta last December and drupa 2016 (May 31- June 10).

➔ [twitter.com/heidelbergus](https://twitter.com/heidelbergus)

Just launched is Heidelberg Connect, the hub for all Heidelberg content of interest to the print industry: press releases, videos, white papers, brochures, and more. You will also find a blog that will provide a problem-solving mix of news, expert advice, and business case studies.

➔ [news.heidelbergusa.com](http://news.heidelbergusa.com)

Heidelberg's YouTube channel is a rich visual library of product demos, practical tutorials, technology updates, and customer insights.

➔ [www.youtube.com/user/Heidelguy](http://www.youtube.com/user/Heidelguy)

Heidelberg, of course, also is on Facebook where there is plenty of material for everyone who enjoys learning about the art and the craft of printing.

➔ [www.facebook.com/heidelbergusa](http://www.facebook.com/heidelbergusa)

Whether you follow all of these channels or some of them, the depth it will add to your relationship with Heidelberg will be worth the investment of your time. Hilary Rowser, Heidelberg's PR & Marketing Specialist, welcomes suggestions and feedback. Contact her at 770-419-6518 or [Hilary.Rowser@heidelberg.com](mailto:Hilary.Rowser@heidelberg.com).

<sup>1</sup>Pew Research Center, "Social Media Usage: 2005-2015" (October 8, 2015)

# On The HORIZON

## Press



### THE OPPORTUNITY

Heidelberg intends to lead the industry in promoting the advantages of printing with UV-curable inks and coatings by showing that:

- UV production shrinks job cycle times—there’s no wait for drying, so sheets go straight to postpress
- UV is now mainstream in the commercial print market and in some segments of packaging
- Products printed on UV-equipped Heidelberg presses with Saphira UV consumables are durable and beautiful

### THE SOLUTION

The Speedmaster XL 106 8P+L with X4 delivery at Heidelberg’s Print Media Center in Kennesaw, GA, is the ultimate demonstration platform for UV production.

- The first press in the world to incorporate the full range of available UV curing technologies
- Curing takes place at top running speeds: up to 18,000 sph in straight mode or perfecting

## e-Commerce



### THE OPPORTUNITY

Customers demand an enhanced online shopping experience when ordering from Heidelberg, including the ability to do product research on their own.

- Heidelberg listened and launched a completely revamped system for purchasing its products

### THE SOLUTION

The Heidelberg eShop, an easy to use, customizable e-commerce portal where customers can now fill all of their everyday consumable needs.

- More than 7,500 products available to order 24/7/365
- Offers a complete selection of consumables and select wear-and-tear parts

## 4D Printing



### THE OPPORTUNITY

Printing on flat substrates is good business, but there also is a world of profitmaking opportunity in printing on mass-produced three-dimensional objects.

- Sports balls, bottles, cans, helmets, aircraft and automotive components: just a tiny sample of the wide range of objects that are printable

### THE SOLUTION

Heidelberg calls it “4D printing” with Jetmaster Dimension: the solution that brings digital printing to the 3D world.

- Jetmaster Dimension: a suite of Heidelberg-developed technologies for customized, flexible, high-quality inkjet printing on solid objects

## Your guide to the latest problem-solving innovations in equipment, software, supplies, and services from Heidelberg, the industry's only all-in-one provider of solutions for graphic production.

### THE SPECIAL FEATURES

The press is equipped with three UV curing methods, each of which can be used in demonstration runs:

- Full UV, commonly referred to mercury UV, the most widely adopted process
- LE (low energy) UV, often with iron-doped lamps, using more highly reactive inks and fewer interdeck lamps than full UV
- LED (light emitting diode) UV, the newest and most energy-efficient method

### THE VALUE-ADDING ADVANTAGES

Customers can run test jobs on the press in the Print Media Center to learn which approach to UV curing will work best for them. Those who purchase UV-capable Speedmasters of their own will discover that:

- Curing can be hybridized by installing more than one type of curing system on the press
- XL technology reduces press makeready times to as little as four minutes

### THE FULL STORY

For more information, please visit <http://bit.ly/UVTimes3>

### THE SPECIAL FEATURES

An improved user interface helps customers make their ordering more efficient.

- Set up and manage multiple shopping lists; add notes for special instructions on orders
- Create standing shopping lists for easy reordering; see complete ordering history
- Enter purchase order number just once—it then appears on all documents

### THE VALUE-ADDING ADVANTAGES

Convenience features streamline the ordering routine from start to finish.

- See images and written descriptions for all products
- Enter promo codes, select shipping method, pay on account or by credit card upon checkout
- Get safety data sheets by clicking on products

### THE FULL STORY

To visit the Heidelberg eShop in the US, visit [shop.heidelberg.com/us](http://shop.heidelberg.com/us)

To visit the Heidelberg eShop in Canada, visit [shop.heidelberg.com/ca](http://shop.heidelberg.com/ca)

### THE SPECIAL FEATURES

Jetmaster Dimension combines scanning, robotics, UV inkjet, and software in a modular and flexible printing system.

- Can print on cylindrical and spherical objects from 10 mm (.4") to 300 mm (11.8") in diameter at 360 dpi in up to four colors plus opaque white or a coating
- Objects can be personalized for high appeal to consumers

### THE VALUE-ADDING ADVANTAGES

With Jetmaster Dimension, printers can enter new and untapped markets for digital production.

- World market for printing on three-dimensional objects is potentially worth hundreds of millions of dollars
- Heidelberg provides full support, including consumables and technical support services

### THE FULL STORY

To learn more about Jetmaster Dimension, please visit <http://bit.ly/Jetmaster4D>

# Field Service Technicians and Their Customers: The Special Relationship



**The public image of Heidelberg is its industry-leading printing technology.** Its human face is the helpful, hands-on presence of its field service technicians—the traveling troubleshooters who reinforce the company's brand promise with every Heidelberg product they bring to peak performance at their customers' plants.

Between them, Dave Garcia, Bert Meisner, and Dave Muscaro have more than 80 years of experience in helping Heidelberg customers derive maximum ROI from their production equipment: Garcia as a service/press technician; Meisner as a specialist in installing, moving, and maintaining prepress systems; and Muscaro in close support of Heidelberg-supplied POLAR cutters.

All agree that there's no such thing as a "typical" day in the life of a field technician. As Meisner says, "every day brings a different challenge," even if it begins with a routine service call. Garcia, for example, was conducting a SystemService maintenance inspection on a Speedmaster XL 105 when he learned that another Speedmaster in the pressroom was having intermittent performance issues. An inspection of that machine and the quick delivery of a part for it had the press back in full working order the next day.

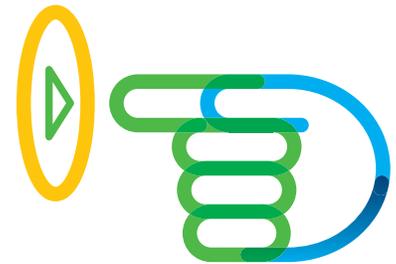
Heidelberg field service reps understand that, when a machine goes down, their intervention is what keeps the breakdown from turning into a profit-killer for the plant. "Nearly everything goes through the cutter," says Muscaro, adding that when this indispensable piece of equipment stops working, so does the rest of the shop. The techs also know that the results of their assistance are quantifiable. As Garcia puts it, "I deliver results to the customer that can be measured: saving time, reducing waste, and improving profits."

For more than 150 years, Heidelberg has regarded the intimacy of its customer relationships as one of its principal business strengths. That's very much a grass-roots accomplishment, and the company owes a great deal of it to the ambassadorship of its field service personnel. For Meisner, it comes from the heart. "The customers are very friendly and treat me with respect," he says. "I am even friends with some of them outside of work."

The techs have also learned to keep pace with the ever-changing demands of the market. Meisner remembers room-sized color electronic prepress systems and marvels at their contrast with today's hand-held computers. Garcia sees the march of progress in Heidelberg's plant energy audits and other eco disciplines. For Muscaro, it's having watched simple guillotine cutters evolve into automated, ergonomically engineered, labor-saving cutting systems.

The accumulation of this kind of experience is what has raised Heidelberg's reputation for product support above that of all other graphic equipment manufacturers. As Garcia says, "I work on creating a win-win end result. The customer is satisfied, Heidelberg is satisfied, and I am satisfied, because it is all about providing favorable customer service."

# Industry 4.0: The New Age of Prosperity for Printing



**Some call it “the fourth Industrial Revolution.”** Others prefer “Industry 4.0.” By either name, it’s a transformation that’s sweeping every sector of manufacturing, and Heidelberg has solutions that can put its customers in the forefront of driving this transformation in printing.

In this kind of print manufacturing, the essential raw material isn’t paper or ink. It’s data—data that connects machines to machines, machines to plant environments, plant environments to management systems, and management systems to customers. Each step of the process generates data, and all of it is captured and analyzed with one objective in mind: to make the entire manufacturing sequence as efficient and as profitable as it can be.

A printing plant operating in this way always knows where to find and how to stay within the “sweet spot” of production. This is the precisely defined set of manufacturing conditions in which production can take place at the lowest possible cost. Hitting this “sweet spot” leads to a significant advantage: ultracompetitive market pricing with the highest margins in the sector.

Only plants monitoring continuous streams of information about their cost structures and equipment utilization can maximize their profits in keeping with the new rules of Industry 4.0. The good news is that Heidelberg

offers every printing and packaging operation an Industry 4.0-compliant toolkit to approach it.

Heidelberg has been marching toward Industry 4.0 ever since it first introduced Prinect, its software architecture for digitally integrated manufacturing, in 2000. Prinect eliminates touch points, friction, and waste wherever it is applied. This builds a transparent environment in which profit can be tracked not just job by job, but across each operation and the process as a whole.

As its printing and packaging customers prepare themselves to enter Industry 4.0, it is no longer enough for Heidelberg to be only a provider of stand-alone production machinery. Now, integration services have equal importance in the portfolio, along with consumable supplies and business consulting assistance.

Industry 4.0 isn’t an abstraction or a buzzword. Think of an automobile assembly line, honed, tested and driven by data to ensure maximum efficiency, where nothing in the process is altered without offline testing to ensure improvement in the entire production output. This approach should be a reality that printers can welcome, implement, and reap rewards from. Stand by—there will be more to come from Heidelberg on the subject.



DELBERG



# Print Diginomics: Calculating the True Cost of Owning a Digital Press

**By now, any offset printing company that does not already have a digital press is probably thinking about buying one.** Changing patterns in the demand for print are putting digital equipment on nearly every printer's must-have list for customer satisfaction and retention.

A digital press may seem like a big investment. Unfortunately, for shops that don't invest carefully, it can become too big. Having digital capability is essential, but there's no reason to pay for more of it than the shop actually needs. Understanding how digital press costs are structured is the key to acquiring equipment that can handle the shop's everyday workload without draining cash as it operates.

Thanks to advancements in technology, high-quality commercial print applications are now achievable on machines that are much more cost-effective than older digital presses. This means that with a little insight into cost structure, you can buy a solution that meets your needs today and doesn't require high growth of the business to deliver ROI.

The chart on page 11 breaks out the components of the total cost to own some (but not all) digital presses. It's complicated. Consider, for example, the monthly base service charge for



parts, service, and labor. If this cost isn't built into the click charge—as it is with Heidelberg's Linoprint CV and Linoprint CP digital presses—the shop will pay \$1,600 to \$2,000 before it runs a single sheet.

The click charge should be a straightforward cost, but it often isn't. There's the question of whether service and consumables are included. How is the click calculated: per separation or per 4/0 impression? Is sheet size a factor? A click charge based on a monthly minimum volume might appear to be an attractive deal, but if the shop fails to meet the volume, the result is a higher realized click charge. Finally, if the click charge is subject to an annual increase, the initial low cost could escalate to make the cost of ownership less competitive over the life of the lease.

Then there could be hidden costs for things like "software maintenance" and "prepress job optimizing." Linoprint owners get peace of mind from knowing that all machine-related operating costs are bundled into the simple, no-minimum-volume click charge. Others may find themselves staring at monthly vendors' statements that are as hard to decipher as cell phone bills.

Just as much careful thought has to be given to the initial outlay: the capital equipment cost. These days, a digital press that costs \$500,000 isn't necessarily better than one in the \$100,000+ range. The bigger price tag might mean greater capacity, but that could be a red flag in and of itself: in the printing industry, underutilized capacity is a perennial economic trap. That is why a shop's best course is to buy a press for the workload it has now, not the volume it expects to be handling at some point in the future.

It's important to remember how much the performance of digital printing equipment has improved in recent years. In terms of color quality, substrate flexibility, and high-output productivity, a new Linoprint CV or Linoprint CP is more than a match for an older digital press costing two, three, or even four times as much. Going head to head with today's high-end machines, a new Linoprint will run more economically than a \$500,000 device in monthly volumes spanning hundreds of thousands of copies.

This is the most sensible route to ROI in digital printing. For most shops, and especially for first-time buyers, it's a better strategy than trying to "grow into" a more expensive press that the shop might never be able to fully cost-justify. And, if a single Linoprint turns out not to be enough, adding a second one when needed would still be a better decision than overinvesting in the \$500,000 alternative.



No capital expenditure is a snap decision, but purchasing a digital press shouldn't be an exercise in obfuscation. Your digital vendor must be able to provide an easy-to-understand breakdown of total ownership costs and a fact-supported explanation of ROI. Any proposal that isn't expressed along these lines is an invitation to buyer's remorse.

Heidelberg's proposition to current and prospective customers always is that the purchase of a Linoprint isn't just a sales transaction—it's a strategic investment. As a first step, Heidelberg presents every customer with a cost analysis that details the true and total cost of owning a Linoprint in a realistic use scenario. This eliminates post-sale surprises and charts the clearest path to ROI.

To recap: buy a digital press based on the volume you expect to run now. Pay only for what you print. Beware of fixed costs such as base service charges and volume commitments. Also look out for "hidden" variable costs attached to things like software maintenance and prepress tweaking.

Above all, bear in mind that shops can get all the digital print quality, applications, stock range, and reliability they want at a lower acquisition cost than was available to them even a few years ago. That's another way of saying that there has never been a better time to buy a digital press—specifically, a Heidelberg Linoprint CV or Linoprint CP—than right now.

**PRINT DIGINOMICS:**

## The Cost to Print with Anicolor

One way to misinterpret the cost breakeven point between offset printing and digital printing is to compare a piece of aging offset equipment with a current digital press. In this scenario, digital retains the cost-per-piece advantage over offset in runs up to thousands of copies—the older offset press just isn't economical in smaller quantities.

The picture changes dramatically with new press technology, particularly with Anicolor, the digitally integrated, zoneless short inking system for the Speedmaster XL 75. Anicolor makes ready in four minutes and comes up to color in fewer than 30 waste sheets. That means the press can hold its own with digital devices in volumes that once were off-limits to offset but now can be run profitably using the process that most commercial shops know best.

A tool created by Printing Industries of America (PIA), the PrintAS Cost Calculator\*, measures the economy Anicolor can achieve in short runs. Using operating cost data from the Speedmaster XL 75 Anicolor and a digital press in a comparable 23" x 29" format, the spreadsheet shows breakeven between the two platforms occurring at fewer than 300 sheets. Below this cutoff, there is a higher chance for a smaller unit cost with digital.

This makes Anicolor extremely attractive for short runs. As an offset press, it also yields economies of scale in high volumes. The bottom line: Anicolor printing is competitive with—and often superior to—digital printing in all of the run lengths that commercial shops most commonly handle. Heidelberg argues that what's left for the digital niche is the personalized or ultra-short-run market—the perfect fit for the Linoprint CV and Linoprint CP.

\*Members of PIA can download the PrintAS Cost Calculator at <http://printing.org/freecalculator>

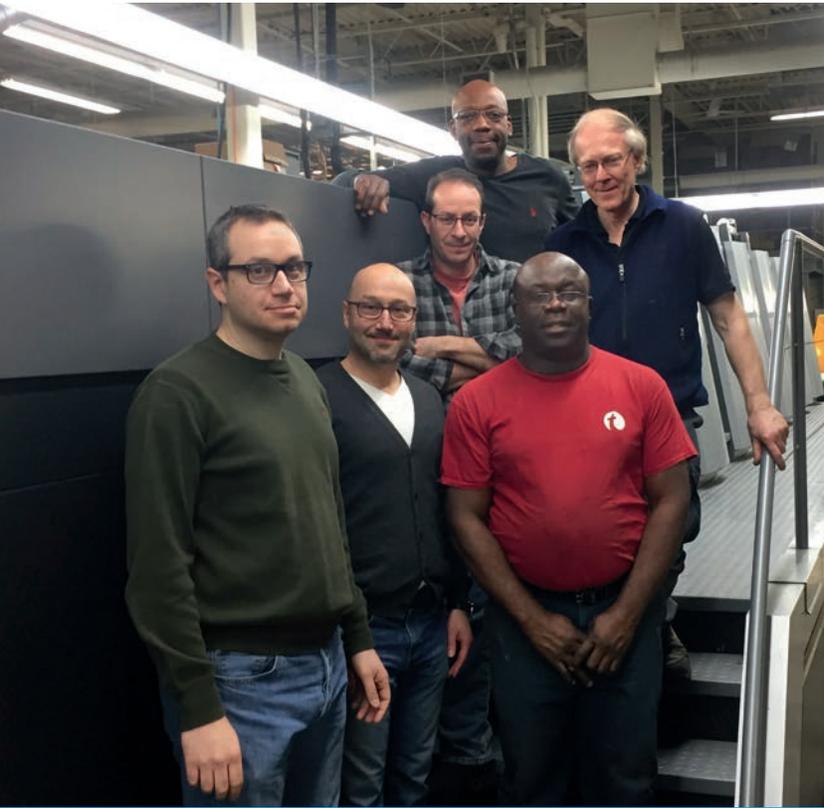
## DIGITAL PRESS: Total Cost of Ownership

- CAPITAL EQUIPMENT COST
- MONTHLY BASE SERVICE CHARGE
- CLICK COST
- CONSUMABLES  
(IF NOT INCLUDED IN CLICK COST)
- OPERATOR COST AND TRAINING
- SUBSTRATE COST
- ENERGY COST
- SITE PREPARATION (ELECTRICAL, HVAC\*, ETC.)
- PREPRESS COST
- SALES AND MARKETING COSTS (SG&A\*\*)



\*heating, ventilating, and air conditioning

\*\*selling, general, and administrative expense



Front row, from left: Tower Litho partners Paul Siriopoulos and Dino Siriopoulos; Troy Quain. Rear row, from left: Joe Simone, Percy Harrison, and Trevor Perrin.

## Why Having a Speedmaster XL 106 Is “Half the Sale” at Tower Litho

**If perception is reality, then one reality at Tower Litho is that a formidable-looking litho press can not only produce beautiful printing—it can sell what it produces as well.**

That’s how Dino Siriopoulos describes the effect that the appearance of his Speedmaster XL 106 has on customers. He says that once they’ve had a chance to appreciate its size, speed, and features, “half of the sale is right there.” They come away with confidence, he says, that their jobs are going to be done with the finesse that only a press of the Speedmaster XL 106’s capabilities can deliver.

Naturally, the owner of the press also has to do his part of the selling, and Siriopoulos, president of the Scarbor-

ough, ON, trade printing firm, seals customer relationships by treating every job as a fresh opportunity to excel. “We are not a one-pass print type of shop,” he says. “We don’t just schedule randomly, first-come, first served.” No job gets a slot, he explains, until it has been thoroughly analyzed and the customer is fully aware of the quality requirements that will have to be met if the job is to be a success.

There’s no substitute for scrupulous attention to detail at Tower Litho, because its customers are all industry professionals: printing brokers and printing companies for which Tower Litho produces virtually all of its work. These demanding clients know Siriopoulos means it when he says, “I am not a gang-run printer. We’re trying to be headache-free for our clients.”

Dedication to customer satisfaction has been always been a given at the 45-year-old business, run today by Siriopoulos and his brother and partner, Paul Siriopoulos. The brothers and their 45 employees operate out of a 25,000-square-foot-plant that also has digital and wide-format printing equipment. Services include web-to-print ordering and project management: for example, the installation of signage and banners that the plant has produced.

Multicolor offset printing to GRACoL G7 standards remains the heart of the business, and the foundation of that quality in the Tower Litho pressroom is its two-year-old Speedmaster XL 106. “The work done at Tower Litho is generally complicated and premium quality print, and as a result, we needed the best possible tool for the job,” says Dino Siriopoulos.

Configured in six colors with coating and UV curing, the press has a fully automatic Autoplate plate mounting system that can have the press up and running in 90 seconds. Another asset is Prinect Inpress Control, a built-in inspection and adjustment system that keeps registration tight and color accurate from start to finish.

The result, says Siriopoulos, is that he can run color at full speed on a press that performs best at the top end of its range. Flood and spot varnish and UV on conventional and synthetic stocks are also parts of the Speedmaster XL 106’s repertoire. With everything it can do, “it’s one and a half to two presses in one,” Siriopoulos says. Backing it up in the offset department is an eight-color Speedmaster XL 105 that he installed in 2007.

Offset lithography continues to be the company’s mainstay, and the anchor of that end of the business is Siriopoulos’s imposing Speedmaster XL 106. He says the investment it represents “gives the impression that we’re not going anywhere”—anywhere but up, that is, when it comes to press performance, print quality, and customer service.

# Doubling Down on Peak Performance at DS Graphics



*Jim Bagley (left), Pressroom Manager, and Joel White, Executive Vice President for print operations, DS Graphics.*

Jack McGrath of DS Graphics says that printers have no excuse for “meandering” if they expect to keep up with the highly compressed time-to-market requirements that set the pace for print manufacturing today. At DS Graphics, nobody ever meanders, and neither does their equipment—a complement of high-performance Speedmaster presses and Stahlfolders that the Lowell, MA, print and marketing communications firm pushes to the limit of their productivity every day.

DS Graphics made history in 2012 by becoming the first company in the world to install an 18,000-sheets-per-hour Speedmaster XL 106 perfecter with coater, the most advanced press platform that Heidelberg offers. The eight-color, 41” machine is perfectly matched to the 10-color Speedmaster XL 105 that the company installed in 2008.

To keep postpress in step with that blistering pace, the company recently added a high-performance Stahlfolder KH 82. It’s not just speed for speed’s sake, says McGrath, Vice President for sales and marketing. It’s about main-

taining the level of production efficiency across the whole process that’s now needed to keep a printing company profitable.

McGrath notes that DS Graphics, a 42-year-old business owned by the Pallis family, has not had an unprofitable quarter in its last 50. He says this is because the company has learned how to use technology to stay ahead of intensified pressures on production costs.

For a company that derives 75% of its \$43 million annual sales volume from printing, nothing less than the power of Speedmaster XL 106 technology will suffice. But, with this kind of press capability, DS Graphics also knew it had to be certain that there would be no bottlenecks at the folding stage. This is why it sent a team to Heidelberg’s Print Media Center Atlanta to test live work from its Speedmasters on a Stahlfolder KH 82, which inevitably became the machine DS Graphics purchased and installed last November.

Joel White, Executive Vice President for print operations, says that the Stahlfolder KH 82 has broken what used to be the “logjam” created by folders that couldn’t keep up with the high output of the pressroom. The new folder eliminates the choke point by running 40% faster than the older equipment, eclipsing their net output of 55,000 folded sheets per eight-hour shift with its 100,000-sheets-per-shift performance.

This means getting jobs finished and shipped at the same pace at which the Speedmasters are printing. White notes that the high throughput brings a labor cost reduction as well, especially during peak periods when overtime staffing often is needed on the slower machines. Reducing overtime with the help of the Stahlfolder KH 82 has led to “huge savings” in the cost of folding, he says.

White also likes the unit’s compact footprint and its full complement of automation features. Especially helpful, he says, is an onboard camera inspection system that detects blank or spoiled sheets and stops the folder so that they can be removed.

Able supported by the Stahlfolder KH 82, the Heidelberg presses produce 60% to 65% of all the printing that DS Graphics does. The company, which employs 215 people in a 200,000-sq.-ft. plant in Lowell, offers commercial, direct mail, on-demand, and wide-format printing services. The printing supports the marketing and branding campaigns that DS Graphics creates and manages for its customers, to whom it also provides material handling services including assembly, distribution, and warehousing.

This kind of flexibility is always part of the mandate for continuous improvement and maximum operational efficiency at DS Graphics. As McGrath says, if a printing company intends to remain competitive today, “you can’t chase your tail on this.”

# Product & Services Guide

## Consumables.



The right thing. At the right time.  
As simple as that.

## Equipment.

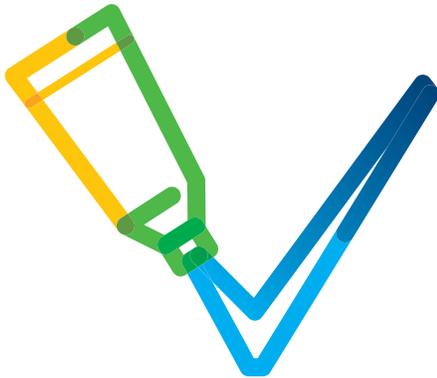


Meet every challenge.  
Today and tomorrow.

## Service.



We cover our customers' backs.  
Ready when they need us.



## Saphira Consumables

A wide range of consumables to cover all of your needs – from prepress to press and postpress. Our experts provide technical and application support for Saphira® products and advise you on how to use them.

### Prepress Products

Saphira Plates & Chemistry  
Saphira Proofing Paper

### Press Products

Saphira Inks (Conventional & UV)  
Saphira Coatings (Aqueous & UV)  
Saphira Digital Inks & Supplies  
Saphira Press Blankets  
Pressroom Chemistries  
Pressroom Supplies  
Saphira Rollers

### Postpress Products

Saphira Stitching Wire  
Saphira Cutting Sticks  
Saphira Glue  
Saphira Banderoles  
Saphira Special Clean



## Prinect Workflow

Prinect® integrates the traditionally separate areas of management, prepress, press, and postpress. This automates the entire printing process from print shop management, online customer connection, prepress, and digital print workflow to makeready optimization, color, quality, machine operation and a full range of services.

### Prinect Prepress

Prinect Renderer  
Prinect Shooter  
Prinect PDF Toolbox  
Prinect Prepress Manager  
Prinect Remote Access  
Prinect Signa Station

### Prinect Color Solutions

Print Color Management (PCM)  
Prinect Color Toolbox  
Prinect Multicolor Toolset

### Prinect Management

Prinect Business Manager  
Prinect Integration Manager  
Prinect Media Manager  
Prinect Web-to-Print Manager

### Prinect Press

Prinect Axis Control  
Prinect Image Control  
Prinect Inpress Control  
Prinect Inspection Control  
Prinect Calibration Tools  
Prinect Classic Center  
Prinect Digital Print Manager  
Prinect Easy Control  
Prinect Online Kit  
Prinect Press Center  
Prinect Press Center Compact  
Prinect Pressroom Manager

### Prinect Postpress

Compufold Workflow CFW  
Compustitch CSW  
POLAR P-Net with Compucut  
Prinect Postpress Manager  
Production Data Management

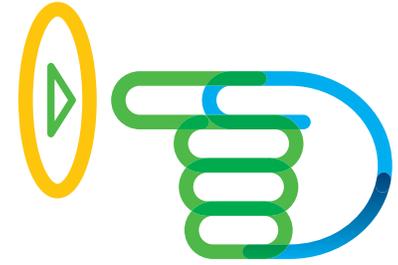
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# Suprasetter Computer-to-Plate Devices (CtP)

Based on the experience acquired with several thousands of installed CtP systems worldwide, the Suprasetter® is a platesetter generation that sets new standards in all format classes.

Product Name	Image Area, Max.	Resolution	Plates/Hour
Suprasetter A52	25.59 × 20.67"	2,540 or 2,400 dpi	Up to 27
Suprasetter A75	25.59 × 29.52"	2,540 or 2,400 dpi	Up to 22
Suprasetter A106	36.1 × 41.5"	2,540 or 2,400 dpi	Up to 18
Suprasetter 106	36.14 × 44.88"	2,540 or 2,400 dpi	Up to 15, 21, 27, 33, 38,42
Suprasetter 145	55.63 × 57.48"	2,540 or 2,400 dpi	Up to 15, 25, 35
Suprasetter 162	55.63 × 64.17"	2,540 or 2,400 dpi	Up to 15, 25, 35
Suprasetter 190	55.63 × 75"	2,540 or 2,400 dpi	Up to 15, 25
SDP-Eco 1630IIR	15.9 × 28.25"	1,200, 1,500, 1,800, 2,400 dpi	Up to 78 (12 x 18" plate)

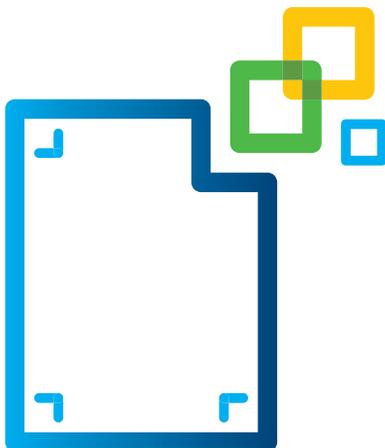


# Speedmaster Sheetfed Offset Presses

Speedmaster® sheetfed offset presses offer a high level of automation and productivity, primarily targeting industrialized printing operations. These presses can also be flexibly equipped for a wide range of special applications.

Product Name	# Units	Max. Speed (sph)	Max. Sheet Size	Max. Image Size	Stock Thickness
Speedmaster SM 52	2 and 4	15,000	14.56 x 20.47"	14.17 x 20.47"	0.0012-0.016"
Speedmaster SX 52*	2-10	15,000	14.56 x 20.47"	14.17 x 20.47"	0.0012-0.016" (opt.: up to 0.024)
Speedmaster SM 74	2 and 4	15,000	20.87 x 29.13"	20.08 x 29.13"	0.0012-0.024"
Speedmaster SX 74*	2-8	2-7: 15,000, 8-10: 13,000	20.87 x 29.13"	20.08 x 29.13"	0.0012-0.024"
Speedmaster XL 75*	2-14	15,000 straight/perfecting 18,000 option (straight)	20.87 x 29.53" (C) 23.82 x 29.53" (F)	20.08 x 29.13" (C) 23.03 x 29.13" (F)	0.0012-0.032"
Speedmaster XL 75 Anicolor*	2-12	15,000	20.87 x 29.53" (C) 23.82 x 29.53" (F)	20.08 x 29.13" (C) 23.03 x 29.13" (F)	0.0012-0.032"
Speedmaster CX 102	2-12	16,500	28.35 x 40.16"	27.95 x 40.16"	0.0012-0.040"
Speedmaster SX 102*	2-8	14,000	28.35 x 40.16"	27.95 x 40.16"	0.0012-0.032"
Speedmaster CD 102	2-8	2-8: 15,000	28.35 x 40.16"	27.95 x 40.16"	0.0012-0.040"
Speedmaster XL 106*	2-18	18,000 straight; 15,000 or 18,000 option for perfecting	29.53 x 41.73"	29.13 x 41.34"	0.0012-0.040"
Speedmaster XL 145*	4-12	15,000 straight; 12,000 perfecting 16,500 or 18,000 option for straight	41.73 x 57.09"	40.94 x 57.09"	depends on application; e.g. for board: 40 pt.
Speedmaster XL 162*	4-12	15,000 straight; 12,000 perfecting 16,500 option for straight	47.64 x 63.78"	46.85 x 63.78"	depends on application; e.g. for board: 40 pt.

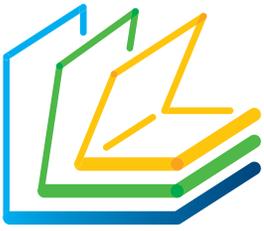
\*PERFECTING OPTION AVAILABLE



# Linoprint Digital Presses

The Linoprint® is an advanced digital color production system built for reliability, flexibility and straightforward operation with the print quality of an offset press.

Product Name	Max. Speed	Max. Sheet Size	Max. Stock Thickness	Max. Monthly Volume
Linoprint CM	135 pg/minute	13 x 19.2" (B/W only)	300 gsm	450,000 A3/13 x 19" Sheets
Linoprint CE	80 pg/minute	12.7 x 19.2"	300 gsm	75,000 A3/13 x 19" Sheets
Linoprint CV	80 & 90 pg/minute	13 x 27.5"	360 gsm	350,000 A3/13 x 19" Sheets
Linoprint CP	110 & 130 pg/minute	13 x 27.5"	400 gsm	850,000 A3/13 x 19" Sheets



# Stahlfolder Folding Machines

Heidelberg offers a comprehensive line of buckle plate and combination folders and mailing systems as part of the Stahlfolder® series. Their modular design and range of accessories ensure maximum flexibility and productivity

Product Name	Feeder	Non-Auto	Auto	Sheet Size Max.	Sheet Size Min.	First Station	Second Station	Third Station	Fourth Station	Roller Diameter	Min. Speed	Max. Speed 1st Station
Stahlfolder Ti 36	Flat Pile	X		14.17 x 25.59"	3.15 x 3.94"	6	6			1.26" (32mm)	394 in/min	6299 in/min
Stahlfolder Ti 36	Flat Pile Tremat	X		14.17 x 25.59"	5.51 x 7.48"	6	6			1.26" (32mm)	394 in/min	6299 in/min
Stahlfolder Ti 36	NSF 36	X		11.81 x 8.27"	3.15 x 4.72"					1.26" (32mm)		6299 in/min
Stahlfolder Ti 52	Flat Pile	X		20.47 x 33.07"	3.94 x 5.91"	4 or 6	4 or 6	2		1.58" (40mm)	394 in/min	7874 in/min
Stahlfolder Ti 52	Flat Pile Tremat	X		20.47 x 31.57"	5.51 x 7.87"	4 or 6	4 or 6	2		1.58" (40mm)	394 in/min	7874 in/min
Stahlfolder Ti 52	Round Continuous	X		20.47 x 33.07"	3.94 x 5.91"	4 or 6	4 or 6	2		1.58" (40mm)	394 in/min	7874 in/min
Stahlfolder Ti 52	NSF 36	X		11.81 x 8.27"	3.15 x 4.27"							
Stahlfolder CH 56	Flat Pile Tremat	X		22.05 x 35.43"	5.51 x 7.09"	4 or 6				1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder CH 56	Round Continuous	X		22.05 x 50.39"	5.51 x 7.09"	4 or 6				1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder CH 66	Flat Pile Tremat	X		25.98 x 40.94"	5.51 x 7.09"	4 or 6				1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder CH 66	Round Continuous	X		25.98 x 50.39"	5.51 x 7.09"	4 or 6				1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder CH 66	Pallet Feeder Tremat	X		25.98 x 40.94"	5.51 x 7.09"	4 or 6				1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder CH 78	Flat Pile Tremat	X		32.28 x 47.24"	5.51 x 7.09"	4 or 6				1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder CH 78	Round Continuous	X		32.28 x 50.39"	5.51 x 7.09"	4 or 6				1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder CH 78	Pallet Feeder Tremat	X		32.28 x 47.24"	5.51 x 7.09"	4 or 6				1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder BH 56	Flat Pile Tremat		X	22.05 x 35.43"	5.51 x 7.09"	4 or 6	4 or 6	4		1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder BH 56	Round Continuous		X	22.05 x 50.39"	5.51 x 7.09"	4 or 6	4 or 6	4		1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder BH 66	Flat Pile Tremat	X	X	25.98 x 40.94"	5.51 x 7.09"	4 or 6	4 or 6	4		1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder BH 66	Round Continuous	X	X	25.98 x 50.39"	5.51 x 7.09"	4 or 6	4 or 6	4		1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder BH 66	Pallet Feeder Tremat	X	X	25.98 x 40.94"	5.51 x 7.09"	4 or 6	4 or 6	4		1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder BH 82	Flat Pile Tremat	X	X	32.28 x 47.24"	5.51 x 7.09"	4 or 6	4 or 6	4	2	1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder BH 82	Round Continuous	X	X	32.28 x 50.39"	5.51 x 7.09"	4 or 6	4 or 6	4	2	1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder BH 82	Pallet Feeder Tremat	X	X	32.28 x 47.24"	5.51 x 7.09"	4 or 6	4 or 6	4	2	1.73" (44mm)	984 in/min	7874 in/min
Stahlfolder TH 56	Flat Pile Tremat	X	X	22.05 x 35.43"	5.51 x 7.09"	4, 6, or 8	4, 6, or 8	2 or 4		1.73" (44mm)	984 in/min	9055 in/min
Stahlfolder TH 56	Round Continuous	X	X	22.05 x 50.39"	5.51 x 7.09"	4, 6, or 8	4, 6, or 8	2 or 4		1.73" (44mm)	984 in/min	9055 in/min
Stahlfolder TH 66	Flat Pile Tremat	X	X	25.98 x 40.94"	5.51 x 7.09"	4, 6, or 8	4 or 6 (56) 4, 6, 8 (66)	2 or 4 (56 & 66)		1.73" (44mm)	984 in/min	9055 in/min
Stahlfolder TH 66	Round Continuous	X	X	25.98 x 50.39"	5.51 x 7.09"	4, 6, or 8	4 or 6 (56) 4, 6, 8 (66)	2 or 4 (56 & 66)		1.73" (44mm)	984 in/min	9055 in/min
Stahlfolder TH 66	Pallet Feeder Tremat	X	X	25.98 x 40.94"	5.51 x 7.09"	4, 6, or 8	4 or 6 (56) 4, 6, 8 (66)	2 or 4 (56 & 66)		1.73" (44mm)	984 in/min	9055 in/min
Stahlfolder TH 82	Flat Pile Tremat	X	X	32.28 x 47.24"	5.51 x 7.09"	4, 6, or 8	4, 6, or 8	2 or 4 (56) 4 (66)	2	1.73" (44mm)	984 in/min	9055 in/min
Stahlfolder TH 82	Round Continuous	X	X	32.28 x 50.39"	5.51 x 7.09"	4, 6, or 8	4, 6, or 8	2 or 4 (56) 4 (66)	2	1.73" (44mm)	984 in/min	9055 in/min
Stahlfolder TH 82	Pallet Feeder	X	X	32.28 x 47.24"	5.51 x 7.09"	4, 6, or 8	4, 6, or 8	2 or 4 (56) 4 (66)	2	1.73" (44mm)	984 in/min	9055 in/min
Stahlfolder KH 66	Flat Pile Tremat	X	X	25.98 x 40.94"	5.51 x 7.09"	4 or 6				1.73" (44mm)		9055 in/min
Stahlfolder KH 66	Round Continuous	X	X	25.98 x 50.39"	5.51 x 7.09"	4 or 6				1.73" (44mm)		9055 in/min
Stahlfolder KH 66	Pallet Feeder Tremat	X	X	25.98 x 40.94"	5.51 x 7.09"	4 or 6				1.73" (44mm)		9055 in/min
Stahlfolder KH 78	Flat Pile Tremat	X		30.71 x 47.24"	5.51 x 7.09"	4 or 6				1.73" (44mm)		9055 in/min
Stahlfolder KH 78	Round Continuous	X		30.71 x 50.39"	5.51 x 7.09"	4 or 6				1.73" (44mm)		9055 in/min
Stahlfolder KH 78	Pallet Feeder Tremat	X		30.71 x 47.24"	5.51 x 7.09"	4 or 6				1.73" (44mm)		9055 in/min
Stahlfolder KH 82	Flat Pile Tremat		X	32.28 x 47.24"	5.51 x 7.09"	4 or 6				1.73" (44mm)		9055 in/min
Stahlfolder KH 82	Round Continuous	X		32.28 x 50.39"	5.51 x 7.09"	4 or 6				1.73" (44mm)		9055 in/min
Stahlfolder KH 82	Pallet Feeder Tremat	X		32.28 x 47.24"	5.51 x 7.09"	4 or 6				1.73" (44mm)		9055 in/min
Stahlfolder KH 82	PFX Feeder		X	32.28 x 47.24"	5.51 x 7.09"	4 or 6				1.73" (44mm)		9055 in/min
Stahlfolder TH 96	PFX Feeder No Shingling			38 x 51.97"	16.54 x 11.81"	6	4, 6, or 8	4 (66)	2 (56)	1.73" (44mm)		9055 in/min
Stahlfolder TX 96	PFX Feeder		X	38 x 51.97"	16.54 x 11.81"	6	6			1.73" (44mm)		9055 in/min

# POLAR High Speed Cutters

POLAR® high-speed cutters meet the highest demands regarding quality, efficiency, and durability. The high-speed cutter can be employed either as an individual machine or as the center of an automatic cutting system.

Cutters	Cutting Width	Clamp Opening	Feed Depth
POLAR 56	22"	3.15"	22"
POLAR 66	26.375"	3.125"	26.375"
POLAR 78	30.6875"	4.75"	30.6875"
POLAR 80	31.5"	3.93"	31.5"
POLAR 92	36.25"	5.125"	36.25"
POLAR 115	45.25"	6.5"	45.25"
POLAR 137	54"	6.5"	57"
POLAR 155	61"	6.5"	61" (78" opt.)
POLAR 176	69.3125"	6.5"	88.5"

## POLAR PACE Cutting Systems:

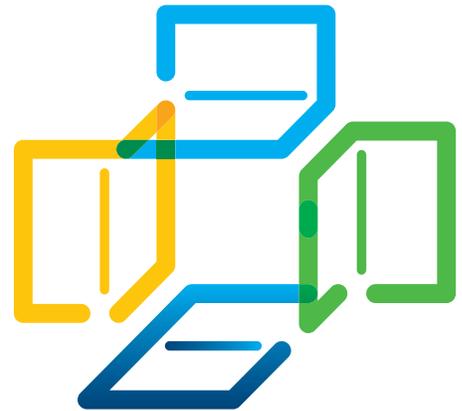
PACE stands for "POLAR Automation for Cutting Efficiency." These systems, consisting of POLAR cutters integrated with components for jogging, turning, loading, and unloading, offer the highest level of automated productivity with the lowest level of staffing. PACE systems can be configured around POLAR high speed cutters 137, 155, and 176.

Product Name	Performance	Top Trim Min/Max	Front Trim Min/Max.	Bottom Trim Min/Max.	Book Thickness
POLAR BC 330 3-Side Trimmer	220 books/hr (single mode) 520 books/hr (multiple mode)	0.08 – 3.94 in.	0.08 – 3.94 in.	0.08 – 3.94 in	0.12 – 2.01 in.

## Die Cutters

High productivity and greater flexibility for effective die cutting and embossing. Heidelberg's die cutters are ideal for a whole host of applications – from short to long runs and from complex layouts to just-in-time packaging production.

Die Cutting	Sheet Size Max.	Sheet Size Min.	Machine Speed Max.
Easymatrix 106 C/CS	29.53 × 41.73"	14.2 × 17.8"	7,700 sheets/hour
Promatrix 106 CS	29.92 × 41.73"	11.82 × 13.78"	8,000 sheets/hour
Varimatrix 82 CS	23.82 × 32.09"	11.02 × 12.06"	8,000 sheets/hour
Varimatrix 105 C/CS	29.53 × 41.33"	11.81 × 13.78"	7,500 sheets/hour



## Folder Gluers

High processing quality, short makeready times and consistent user-friendliness for high-performance handling of up to 200,000 folding cartons per hour. Produce a broad spectrum of sophisticated and premium cartons in a highly economic way.

Product Name	Width, Max.	Length, Max.	Machine Speed, Max.
Easygluer 100	39.37"	29.56"	984 fpm
Diana Smart 55	21.60"	23.60"	1,476 fpm
Diana Smart 80	31.50"	23.60"	1,476 fpm
Diana Smart 115	45.28"	35.43"	1,476 fpm
Diana X 80	31.50"	35.43"	1,640 fpm/2,132 fpm option
Diana X 115	45.28"	35.43"	1,640/2,132 fpm option



## Service Portfolio

From troubleshooting to workflow optimization, and from maintenance to customized training, Heidelberg Systemservice is your trusted service partner. Because it is not just about servicing your machine, it is about improving your business.

### Technical Services

Parts Coverage
Repair Coverage
Maintenance Inspection
Expert Support
Global Expert Network 24/7
Remote Diagnosis
Remote Monitoring
Software Maintenance
Fitness Check
Print Register Evaluation
Performance Check
Equipment Relocation

### Performance Services

Operator Evaluation
Color Theory Training
Maintenance Training
Princt Press Optimization
Print Color Management
Coater/Sprayer/Dryer
Sheet Travel Training
Press Console Training
Color Quality Certification
Performance Support
Extended Gamut Training
Makeready Training

### Consulting Services

Performance Data Analysis
Performance Review
On-Site Evaluation
Program Design
Process Analysis
Lean Implementation
Workflow Optimization
Print Shop IT Services
Material Flow
KPI Development
Investment Consulting
SOP Implementation

# Show us your HEIDELBERG



JohnsByrne (Niles, IL) recently celebrated the first anniversary of its launch of a 15-unit Speedmaster XL 106. The uniquely configured press consists of three coating units, eight printing units, and four dryers. This enables the company to execute multiple combinations of coating, printing, and drying at speeds up to 18,000 sheets per hour. “Press 384,” as JohnsByrne calls it, is almost 130’ long.

From left, Mike Gustafson, Executive Vice President; Jack Gustafson, Chief Operating Officer; Corey Gustafson, President; and Pate Gustafson, Executive Vice President.



By installing a Varimatrix 105 CS diecutter from Heidelberg, Henry Wurst, Inc. (Kansas City, MO) brought its diecutting work in-house and put an end to costly outsourcing. The Varimatrix CS supports the company's 13 sheetfed offset, web offset, and digital presses at speeds up to 7,500 sph. At the machine, from left, are Operators Brent Wade, Zach Babbitt, and Charlie Quackenbush.



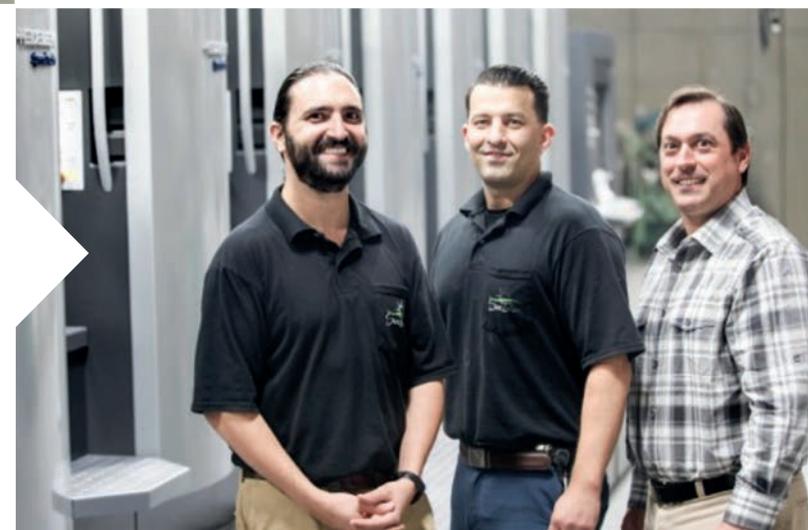
As its name indicates, Paradigm Digital Color Graphics (Southampton, PA) offers digital printing services. But, the company also runs a good deal of work on its five-color, coater equipped Speedmaster SM 52. Founded in 1997, Paradigm Digital Color Graphics specializes in short run, high quality color printing. Pictured: Owner Carl Piccari (left) and Press Operator Bill Friederich



When Professional Printing Center (Chesapeake, VA) decided to invest in a Stahlfolder KH 82 folder the results were so satisfactory that the company added a Stahlfolder TH 66. Operating at up to 20,000 folded sheets per hour, the machines have doubled the plant's folding productivity. From left: Brian Ward, President; Chris Julian, Bindery Manager; and Pat Wilcox, Vice President of Operations.



A Speedmaster CD 102 with a high-performance X package has become the centerpiece of high-quality production at SunDance Marketing Solutions (Orlando, FL). With the automated assistance of Prinect Image Control, the press comes up to color quickly and maintains color consistency throughout each print run. Pictured: JohnHenry Ruggieri, Director of Operations; Damon Jenkins, Operations Lead; and Brad Taylor, Partner.



## HOW IT'S MADE:

### Prepress Workflow:

Prinect Prinance, Prinect Prepress Manager, Prinect Signa Station, Prinect MetaDimension, 400 lpi Heidelberg Hybrid Screening technology

### Platemaking:

Suprasetter S105 with Saphira Thermoplate PN plates

### Printing:

Speedmaster XL 105-6+LX with Prinect Image Control

### Varnish:

Saphira Matte Effect Coating

### Finishing:

POLAR 137 XT cutter with RA4 jogger and Transomat unloader, POLAR Pile Turner, Stahlfolder TH 82 automated folder, Stitchmaster ST 450 fully automated stitcher

### Fonts:

HeidelbergGothicMI,  
HeidelbergGothicCapsMI,  
HeidelbergAntiquaML

*Printed in the US*

