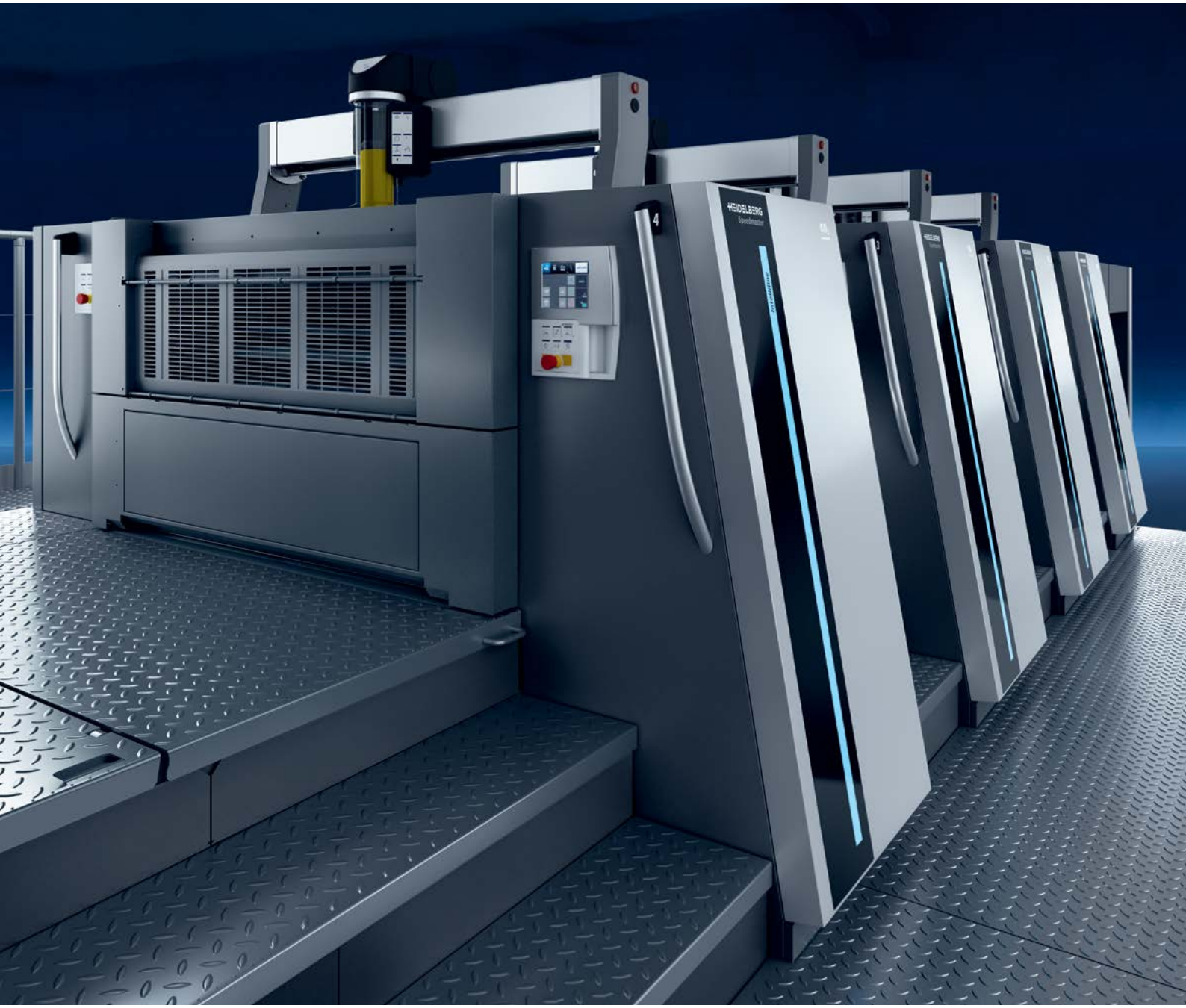
HEIDELBERG

Peak performance for commercial printing. **Speedmaster XL 106.**



Peak Performance
für den Werbe- und Verlagsdruck
Speedmaster XL 106.

A productive partnership. **Quality meets innovation.**

The Speedmaster® XL 106 combines digitalization with state-of-the-art technology. A decisive factor that gives you a real competitive edge.

The cost pressure in commercial printing is enormous. Skilled workers are difficult to find and retain. The new Peak Performance generation Speedmaster XL 106 leverages the potential of your industrial production environment. Our Push to Stop philosophy enables you to achieve largely operator-independent performance. Discover the efficient way of printing in order to succeed in a demanding market.

Partnership with HEIDELBERG® combines quality, productivity and innovation. Our unique service network makes HEIDELBERG a leader in sheetfed offset printing as does our comprehensive expertise in printing technology, hardware and software engineering. We stand for reliability and continuous development.

Benefit from the many advantages of digitalization: In the pressroom, digitalization simplifies process control and machine operation. At a business level, it provides transparency about the productivity of the Speedmaster XL 106 at all times.

When you choose HEIDELBERG, you get more than just a press. You gain access to an ecosystem that offers you real added value – with service, consumables, digital services, software, cloud-based solutions, training and consulting, inventory management and logistics. We accompany you into the future.

heidelberg.com

Technological leader.
Speedmaster XL 106.

The Speedmaster XL 106 opens doors for you – to increased output, higher quality and more profit in industrial commercial printing.

Whether it's short or long runs, lightweight materials or cardboard, low or high area coverage – the flexible Speedmaster XL 106 masters every challenge with flying colors. Experience all-around cost-effective production, with up to 21,000 sheets per hour in straight printing or perfecting.

The Speedmaster XL 106 provides a solid foundation for future-proofing your print shop. Comprehensive automation and seamless digital integration into the Prinect® workflow make autonomous production processes a reality.

Discover a strong overall package. AI-supported assistance systems and extensive presets simplify operation and reduce set-up times and downtimes. The operator is informed of upcoming tasks n real time thanks to app-controlled navigation. Systems such as the Plate to Unit printing plate logistics, high-performance inline measuring systems and non-stop pile logistics in the delivery also relieve the operator of routine order-related activities.

The Speedmaster XL 106 creates the ideal conditions for highly efficient, industrial print production while minimizing the utilization of personnel and resources.

heidelberg.com/en/xl106

HEIDELBERG
Speedmaster

New benchmark.
21,000 sheets per hour.

Even faster and more productive. With up to 21,000 sheets per hour, the Speedmaster XL 106 sets the new benchmark for productivity in straight printing and perfecting. This expands the already wide range of applications in industrial sheetfed offset, particularly in longer runs.

The Speedmaster XL 106 stands for maximum productivity – for peak performance. In practice, production at 18,000 sheets per hour is now the rule rather than the exception – reason enough to expand the range and enable speeds of up to 21,000 sheets per hour. In addition to the general robustness of the machine platform, other features support the new record:

Quickly off the roll
The fourth-generation CutStar

CutStar® combines the benefits of cost-effective roll-fed stock and productivity of up 21,000 sheets per hour. Boost productivity further: with optional fully automatic reelstand, downtimes and waste for reel changes are also eliminated.

heidelberg.com/en/cutstar

Fast on speed
Direct-drive Preset Plus feeder

The direct drive at the feeder allows significantly shorter braking curves. With CutStar, the machine also gets up to speed and back to zero more quickly. This means the high speed can be exploited for smaller print runs too.

Clean production environment
PowderStar XL

Higher ouput does not have to mean higher powder contamination. The new PowderStar® XL counteracts this with up to 15 percent less powder consumption and up to 45 percent less machine and environmental soiling.

If you drive fast, you need good brakes
Dynamic sheet brake

The direct-drive suction belt modules ensure that each sheet is taken over at almost maximum sheet speed and decelerated individually.

Increased machine availability
Uptime XL

Higher mechanical loads require offerings that increase the availability of the machine. This is supported by more robust components and technical features such as the automatic bearer ring maintenance system and high-volume cam rollers. Preventive maintenance programs and services avoid unplanned downtime.

OPERATION

Work with ease.
Intuitive for the best results.

Intelligent automation reduces errors. But production processes do not work without operators. That's why we make sure that working on the press is intuitive and effortless.

Simple, fast and reliable: HEIDELBERG user experience.
Printing has never been so easy: assistance systems support and guide the operator through all the processes. The standardized and ergonomic user guidance makes even complex processes simple and enables maximum productivity in the long term.

Functions for simple and accelerated production:

Central control
Prinect Press Center XL 4 with Wallscreen XL
The modern 24-inch multi-touchscreen with intuitive controls allows you to monitor important presets and current production data. The Prinect Press Center® XL 4 also connects the Speedmaster XL 106 with the Prinect workflow. The open interfaces allow the easy integration and use of third-party software at any time.

heidelberg.com/en/prinect-press-center-xl

Efficiency at a glance
Press Center Mobile and production screen
The flexible Press Center Mobile web application informs you in real time about the status of connected printing machines. It visualizes important production and process data as a basis for optimized processes – either on the mobile device or on the Speedmaster XL 106 production screen.

heidelberg.com/en/press-center-mobile

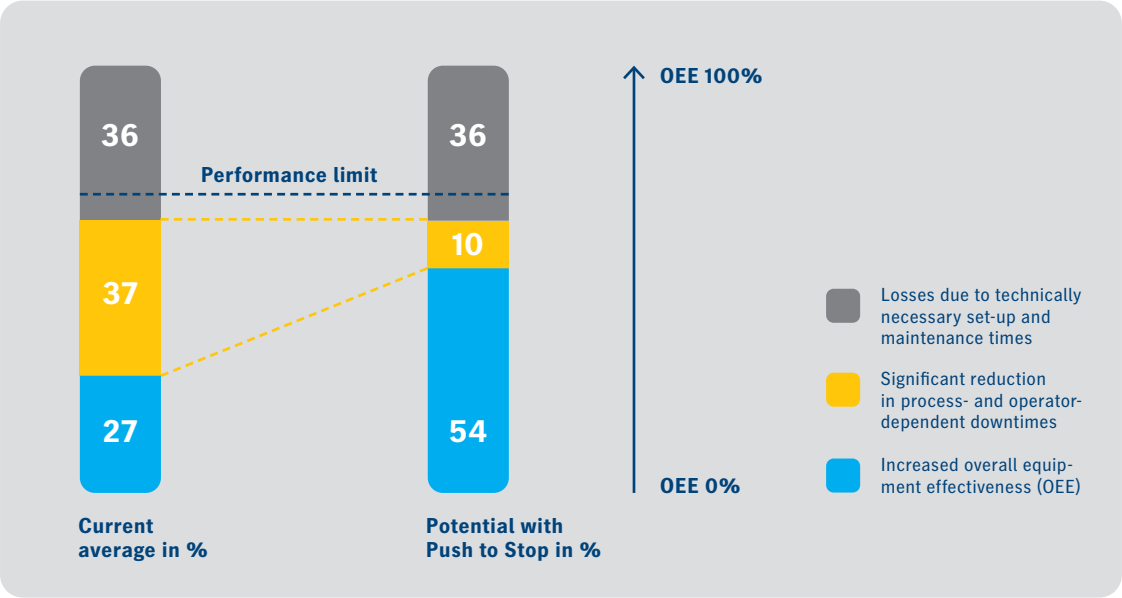
Greater productivity thanks to digitalization
Intelligent assistance systems
Self-learning software systems optimize set-up and production processes. This increases efficiency and quality – quickly and autonomously.

Clear and transparent in real time
Intellistart® 3
The set-up operations required for pending jobs are automatically calculated, processed and displayed. Intellirun provides real-time information on production status and navigates the operator through the production process on the Wallscreen XL. The Intelliline LED system provides an up-to-date overview of the machine status through color-controlled LED elements on the units.

All-arounder meets quality
Hycolor Assistant
When the job is received, the assistance system recommends suitable settings for the Hycolor XL inking/dampening unit, which it calculates using artificial intelligence after analyzing the preview images of the print job. The first good sheet is achieved faster. The operator's workload is reduced.

Greater success in the market. **With increased OEE.**

The new generation Speedmaster XL 106 utilizes the immense spectrum of digital possibilities for outstanding productivity and significantly increased overall equipment effectiveness (OEE).



Industrial printing
Digitalization of production
Digitalization creates more efficient workflows and production processes. The basis lies in networking through the Prinect workflow. Big data provides the relevant information to optimize results and continuously monitor processes.

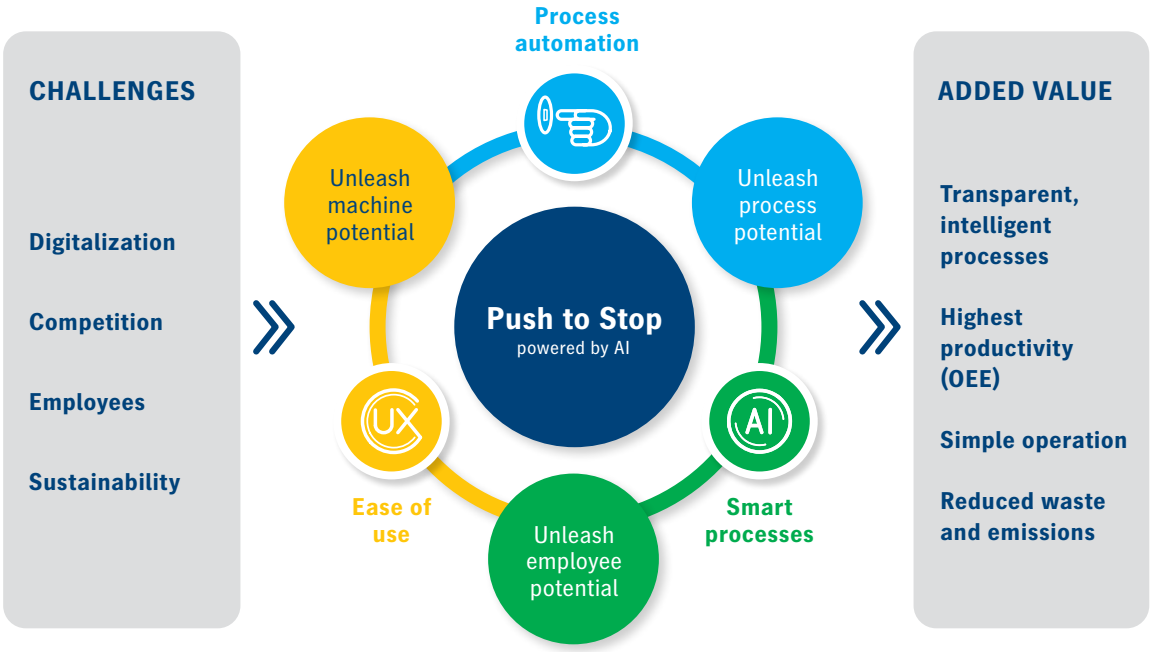
OEE – The key productivity indicator
Recognizing potential for improvement
The OEE measures the output achieved in relation to the maximum output.

The industry average for the Speedmaster XL 106 is around 27 percent OEE. This leaves an untapped potential of 73 percent. About half of this is due to technical reasons – the other half is due to process and operator-related downtimes.

We address this potential with Push to Stop, because that is the only way the advantages of technical innovation can be fully realized. 55 percent OEE and more are already a reality. Exploit the potential of modern offset production.

Unleash your potential.
With Push to Stop.

Digitalization opens up potential. It reduces complexity, speeds up processes and increases productive manufacturing times. We make this usable for you.

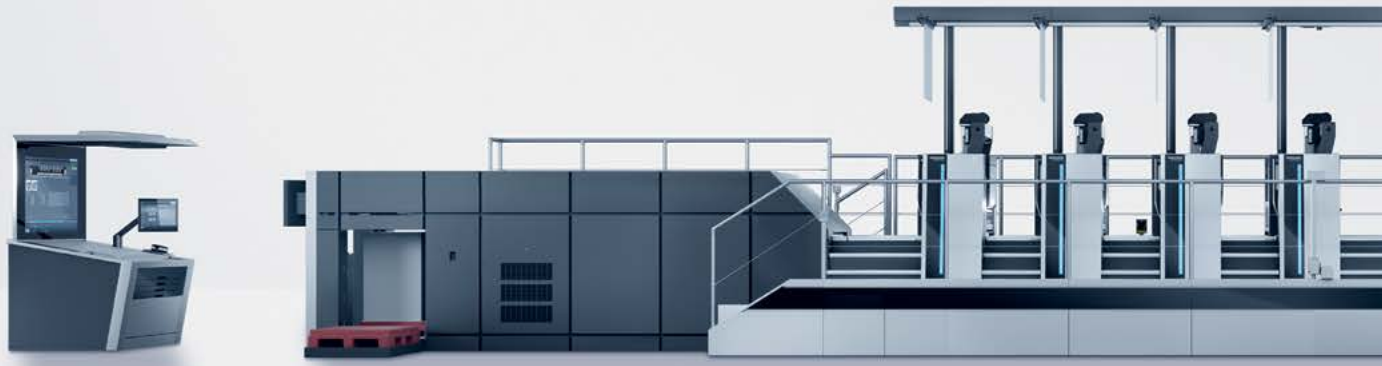


Push to Stop powered by AI
The potentials of modern offset production
The intelligent interplay of process automation, simple operation and artificial intelligence (AI) make offset printing more efficient than ever before. Achieve more with fewer staff without overloading the operators.

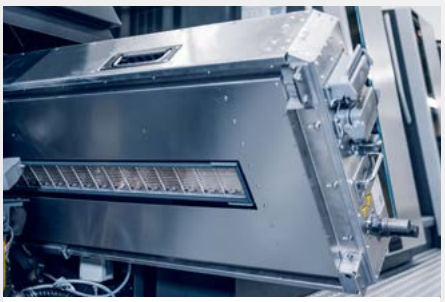
With Push to Stop, processes are started automatically without the need for operator intervention – downtimes are systematically avoided. The operator receives real time information as to when and where intervention is required. In an attractive workplace, the operator's tasked are geared more towards process control than physically demanding routines.

Intelligent assistants
The assistants ensure optimum machine settings, reduce material consumption and support more environmentally friendly production. They optimize processes, ink presetting, powder quantity, washup programs and much more.

SPEEDMASTE



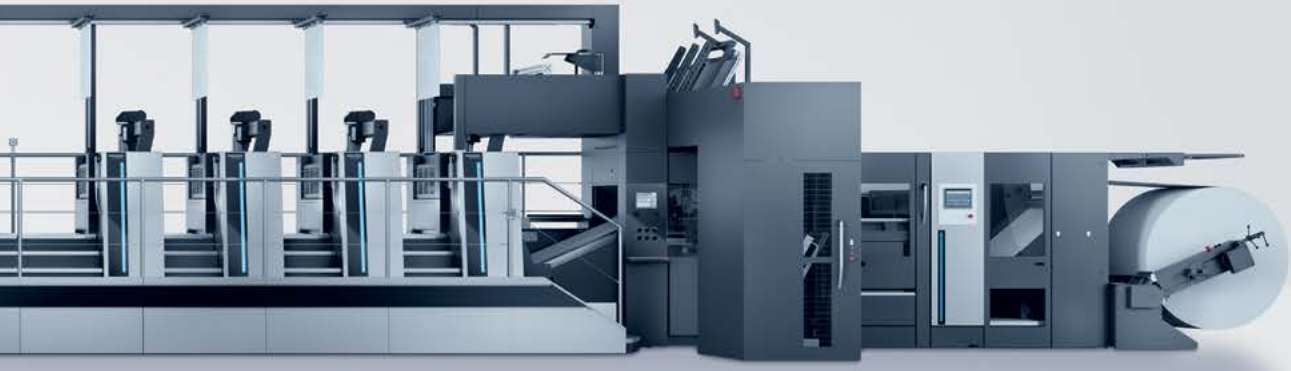
The **dynamic sheet brake** decelerates the sheet in a controlled manner and ensures perfect pile formation.

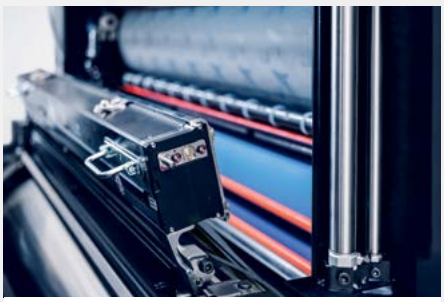


LED dryer systems allow direct finishing of the immediately dry sheet – a major advantage, especially for short runs and fast turnarounds.

Prinect Inspection Control 4 avoids downstream costs by checking each sheet inline on each side with two high-resolution color cameras for hickeys, material defects, scumming, etc.

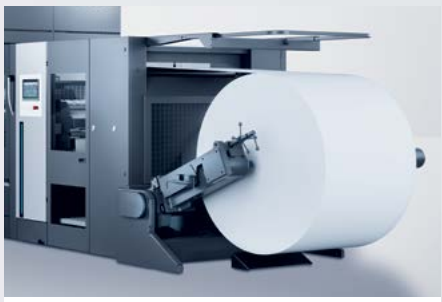
R XL 106





Prinect Inpress Control® 3 finds print control strips, paper white and register marks fully automatically and starts ink control without operator intervention.

New bearer ring maintenance system and **high-volume cam rollers** reduce manual maintenance work and increase availability for reliable production.



The fourth-generation **CutStar** is perfect for producing standardized commercial jobs cost-effectively in the optimum format from roll-fed stock.

6 Waste ejection

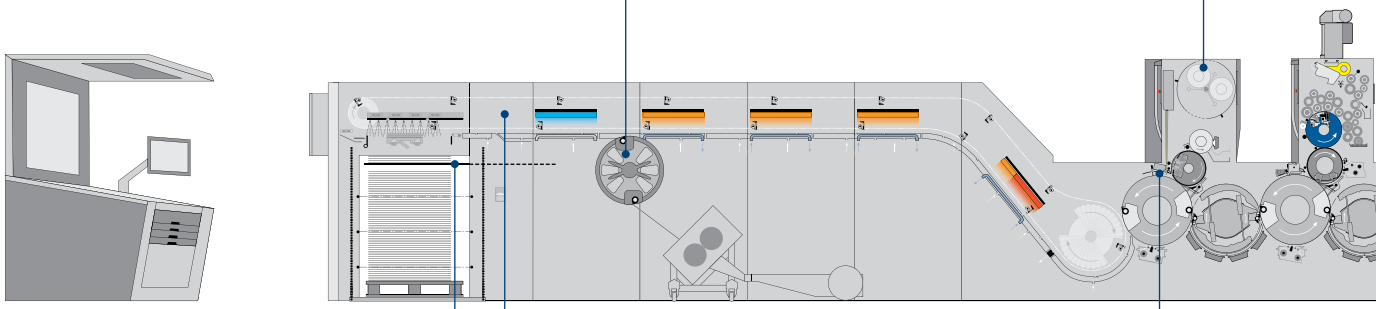
The **waste ejection** system in the delivery automatically rejects faulty sheets during the production run – and only the relevant sheets, precisely according to quality specifications.

5 Push to Stop coating unit

The new **coating unit** ensures high quality through simple operation and short set-up times. Anilox rollers with larger diameter and less weight are designed for maximum printing speeds.

Coating, anilox roller and coating plate changes can be performed with various levels of automation, including semi-/fully automatic coating plate changes with **AutoPlate Coating/Pro**, fully automatic anilox roller changes with **Autoloader** and automatic coating changes in the **Coating Center**.

In **Push to Stop mode**, the coating unit enables parallel changeovers without manual intervention at the same time as other set-up processes and automatic cleaning functions.



8 Non-stop delivery

The **non-stop pile changing** in the delivery ensures uninterrupted production of long runs, even at high speeds. This leads to considerable time savings and minimizes waste.

7 PowderStar XL

The **PowderStar XL**, supported by the **Powder Assistant**, enables zonal powder application and reduces powder consumption by up to 15 percent. In addition, the **Powder Shutter** ensures that excess powder does not get into the machine or the environment.

The **CleanStar®** sustainably reduces soiling of the machine and the environment by extracting excess powder.

2 Hycolor XL inking/dampening unit

The **Hycolor XL inking/dampening unit** ensures consistently high print quality with minimal waste, even on challenging jobs, thanks to intelligent ink distribution and an improved Vario system. The first good sheet is achieved quickly, which increases efficiency and performance.

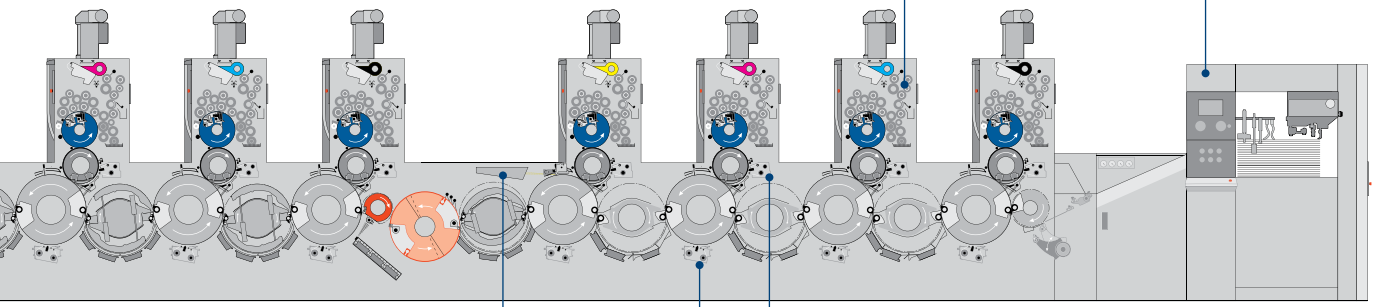
Hycolor Pro dampening unit

The dampening unit with **Hycolor Pro** offers transparency for dampening unit adjustment and, thanks to motorized remote adjustment, allows quick reactions during ongoing production.

heidelberg.com/en/hycolor-pro/experttalk

1 Preset Plus feeder

High-performance feeder with fully automatic presettings for all relevant format and air settings, for extremely short makeready times and steady sheet travel.



4 Prinect Inspection Control 4

The precise **inline sheet inspection system** checks each sheet on both sides for material defects, hickeys, ink splashes, scumming, etc., before any downstream costs are incurred. It does this using two high-resolution color cameras before the perfecting device, after the last printing unit or in the coating unit for optimum quality assurance on both sides.

3 Washup devices

The program-controlled **blanket washup devices** for blanket and impression cylinders combine outstanding washing results with extremely short washing times. The **Wash Assistant** automatically selects the optimum washup program for the inking unit, blanket and impression cylinders based on the degree of soiling.

Speedmaster XL 106

The printing machine shown is a sample configuration. Some of the equipment features presented are optional. Compare the Speedmaster XL 106 with other machines in this segment.

heidelberg.com/xl106/machine-comparison

You can find further information and technical details for your Speedmaster XL 106 here:

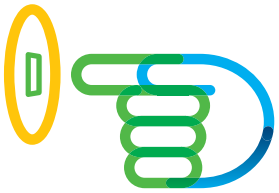
heidelberg.com/en/xl106

AUTOMATION

Simply create more.
With the focus on automation.

The Speedmaster XL 106 gives you a decisive competitive edge. Highly automated, it relieves the operator of time-triggered activities. They produce more efficiently, more predictably and more cost-effectively with consistently high quality.

We call this “Push to Stop”.
Processes are no longer actively started, they are just stopped when necessary. The press operates autonomously, manual interventions are reduced to a minimum, set-up and printing processes run automatically without interruption.



Functions for time- and cost-saving production:

Automatically greater productivity
AutoPlate XL
While the current print job is running, the operator has time to prepare the printing plates for the next job. The fully automatic system changes all printing plates in less than a minute. Blanket and impression cylinders can be washed at the same time.

Short runs without additional staff
Plate to Unit
The operator can prepare the printing plates for up to ten jobs at once. The system automatically supplies the printing units with the required printing plates and disposes of the used ones. Plate changes are more reliable as mechanical damage to the printing plates is eliminated.

Pile change without operator
Non-stop system and delivery logistics
Pile changes in the delivery are carried out at the right time without operator intervention. The pallet is moved sideways out of the delivery. The operator has enough time to remove it before the next pile is printed. The unique non-stop system with pile separation belt forms an auxiliary pile and places it gently on the empty pallet that has just been supplied.

Fully automatic set-up without stopping
Prinect Inpress Control 3
and Prinect Inspection Control 4
Where the operator needs minutes, state-of-the-art measurement and control technology needs only seconds. The Prinect Inpress Control 3 spectral measurement system recognizes print control strips, paper white and register marks and starts ink control automatically. The Prinect Inspection Control 4 integrated inspection system compares the printed sheet with the reference PDF and monitors the production printing. Content, printing and material errors are quickly recognized and expensive downstream costs are avoided.

heidelberg.com/color-measurement-systems

Good sheets, pile after pile
Waste ejection for perfecting presses
Error-free piles are crucial for unmanned end-to-end production. The waste ejection system reliably removes flawed sheets and prevents them from entering the finishing process.

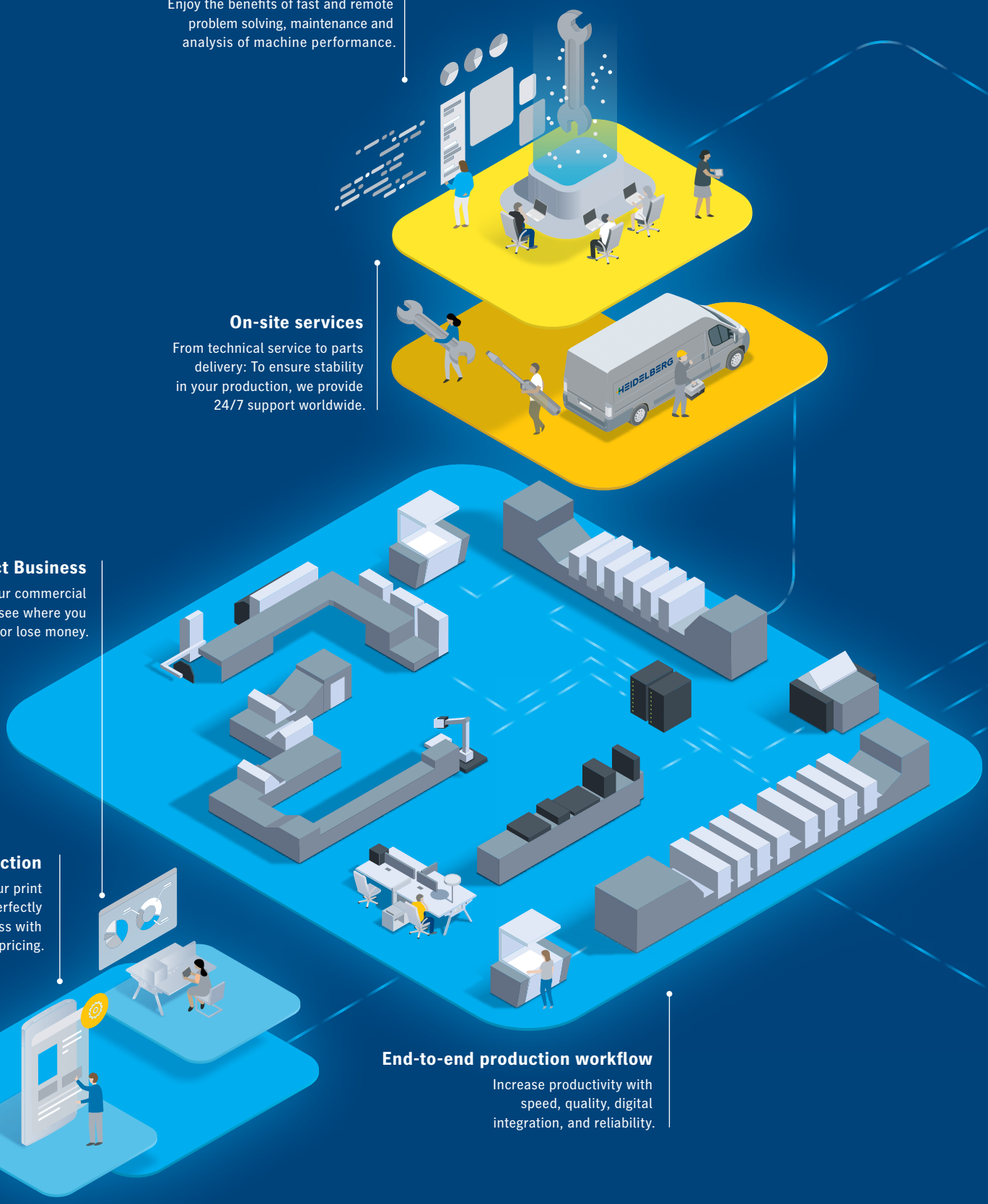
Everything you need in one place.
The HEIDELBERG ecosystem.

Remote Services

Enjoy the benefits of fast and remote problem solving, maintenance and analysis of machine performance.

On-site services

From technical service to parts delivery: To ensure stability in your production, we provide 24/7 support worldwide.



Prinect Business

Automate your commercial processes and see where you make or lose money.

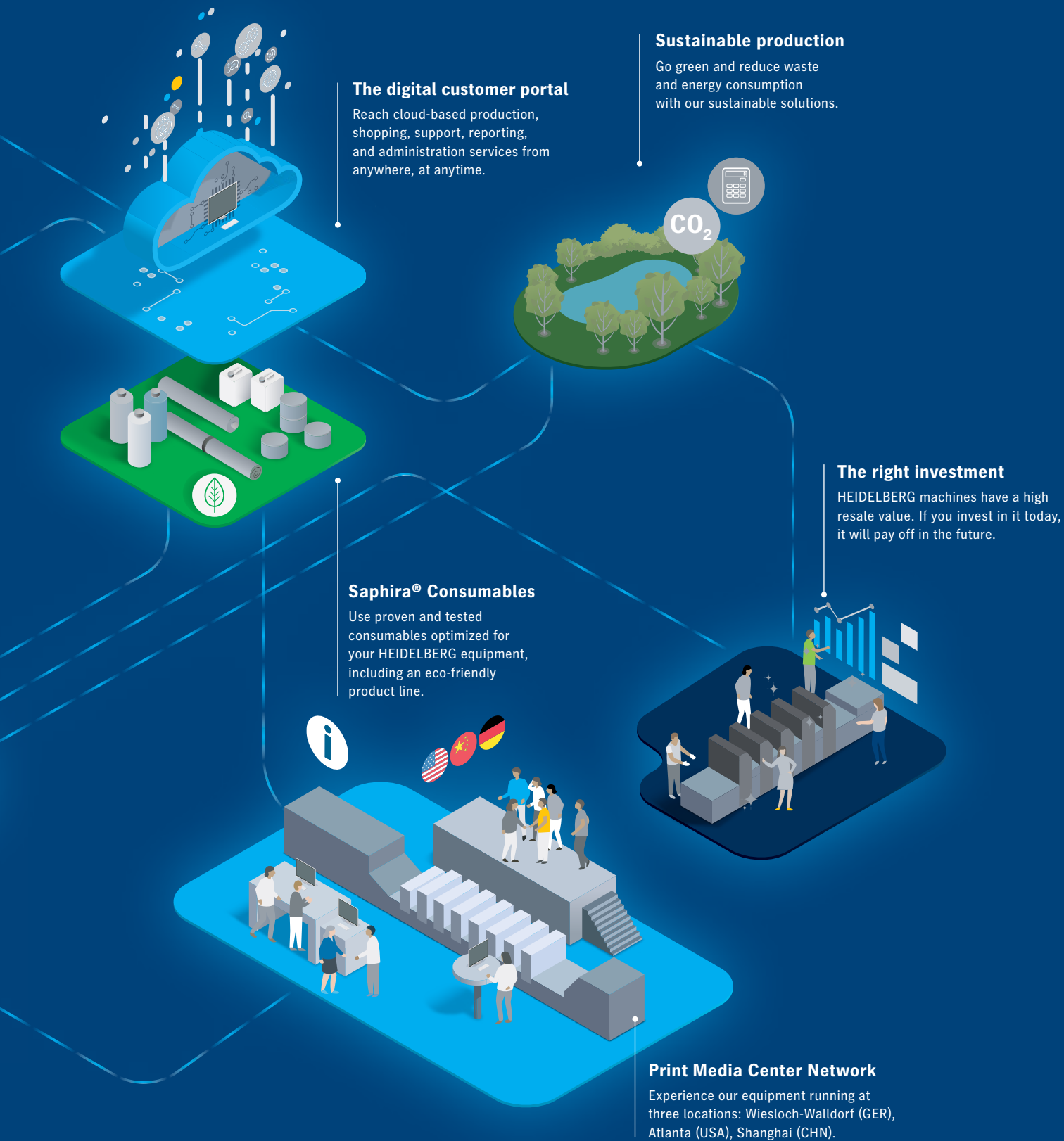
Prinect Production

Make your print processes perfectly seamless with volume-based pricing.

End-to-end production workflow

Increase productivity with speed, quality, digital integration, and reliability.

Every print shop is different, and every customer has unique, comprehensive needs. That is why we have developed our offerings to serve these needs all across the spectrum. What makes us unique is that you can find everything here that makes your print shop smarter, faster, and better. Make HEIDELBERG your one-stop shop for everything that contributes to your success.



The digital customer portal

Reach cloud-based production, shopping, support, reporting, and administration services from anywhere, at anytime.

Sustainable production

Go green and reduce waste and energy consumption with our sustainable solutions.

The right investment

HEIDELBERG machines have a high resale value. If you invest in it today, it will pay off in the future.

Saphira® Consumables

Use proven and tested consumables optimized for your HEIDELBERG equipment, including an eco-friendly product line.

Print Media Center Network

Experience our equipment running at three locations: Wiesloch-Walldorf (GER), Atlanta (USA), Shanghai (CHN).

Leader in the printing process. **Clear advantages for you.**

Sustainably effective

30

40,000

15 %

Prinect Inpress Control 3:
only 30 waste sheets thanks to Prinect Inpress Control 3

DryStar® Combination Eco:
up to **40,000 kWh less energy consumption** per year

PowderStar XL:
up to **15% less powder consumption** with up to **45% less powder emission**

Automated and user-friendly

21,000 sheets per hour:
16% higher maximum speed

CutStar:
up to **15% lower costs** for roll-fed stock

Plate to Unit: **up to 400 job changes a day** thanks to fully automatic printing plate logistics

Waste ejection in the delivery:
uninterrupted finishing thanks to a waste-free pile

21,000

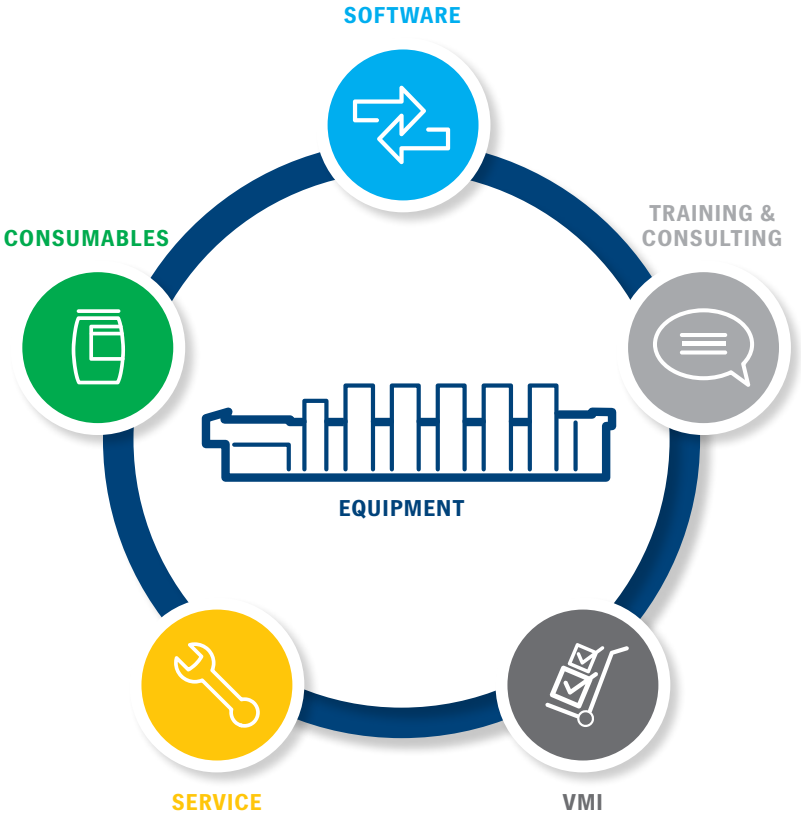
15 %

400

0 min

HEIDELBERG Contracts.
Contract packages as individual as your requirements.

You benefit from a combination of best-in-class products from HEIDELBERG. Our Lifecycle and Subscription packages help you keep your machines running at their best.



Lifecycle
Pay-per-month

Subscription Smart
Pay-per-outcome

Subscription Plus
Pay-per-outcome

Our contracts are scalable to your needs:
We put together a lifecycle contract package for you from at least two of the three components – service, consumables and software. This offers you everything you need for reliable and stable printing production. The services are billed on a monthly basis. Subscription also includes training and consulting, Vendor Managend Inventory (VMI), and optional equipment. VMI automates the management of consumables. Thanks to the strong partnership with HEIDELBERG, you can enjoy the benefits of a comprehensive and optimized print production system. With Subscription, payment is made per printed sheet.

The following applies to both packages: You reduce your process costs and gain more time for your customers.

Have we piqued your interest? Let us work together to create your customized solution package that best fits your needs.
heidelberg.com/contracts

How can we help you?
Get in touch with us.

We hope that this brochure will inspire you. There is more we can tell you about how we could make your printing business more efficient and profitable.

If you are interested in the **Speedmaster XL 106** or would like to learn more about what we can offer, feel free to contact us. We're only ever an e-mail or phone call away.

Reach us by email
contact@heidelberg.com

Use the contact form
heidelberg.com/info

Please find the phone numbers of your local sales organization here:
heidelberg.com/contact

Publishing information
Heidelberger Druckmaschinen AG
Kurfuersten-Anlage 52 – 60
69115 Heidelberg
Germany
Phone +49 6221 92-00
Fax +49 6221 92-6999
contact@heidelberg.com
Further details at:
heidelberg.com

Production note
Image credits: Heidelberger Druckmaschinen AG;
Shutterstock, Jacob Lund (23)
Platemaking: Suprasetter
Printing: Speedmaster
Finishing: Stahlfolder
Consumables: Saphira
Printed in Germany

Trademarks
HEIDELBERG, the HEIDELBERG logotype, Cleanstar, CutStar, Drystar, Inpress Control, Intellistart, PowderStar, Prinect, Prinect Press Center, Saphira, Speedmaster, Stahlfolder and Suprasetter are registered trademarks of Heidelberger Druckmaschinen AG in the U.S. and other countries. All other trademarks are property of their respective owners.

For details on the emissions of the Speedmaster XL 106, please visit us at heidelberg.com/emissiondetails

Liability for contents
The contents of this brochure have been prepared with great care. No warranty or liability is accepted for the correctness, completeness, or accuracy of the information. There is no guarantee or warranty that the customer will be able to achieve the values and numbers (e. g. relating to the function and performance of the machine and the software) specified in the brochure. The information provided is based on ideal conditions and proper use of the machine and the software. Achieving these values and numbers depends on a variety of factors and circumstances that are outside the control of HEIDELBERG (e. g. machine settings, technical conditions, ambient conditions, raw materials and supplies used, consumables used, standard of care and maintenance of the machine, expertise of the operator, meeting the respective system requirements, etc.).

Version Mar 2024