### **HEIDELBERG**

## The Peak Performance class. **Speedmaster XL 75.**



## We accompany you. On your journey into the digital future.

For over 160 years, HEIDELBERG® has prided itself on having a vital edge. That's why print shops all over the world trust our expertise and experience. Now they are also looking to us to help with the digital transformation of their business. As a reliable partner and technology pioneer, we create added value. We do so by providing printing systems that use Push to Stop technology for autonomous, top-quality production and data-supported services. Services that are paving the way to the Smart Print Shop – the digitally connected, intelligent, highly automated print shop of the future. For better decisions, higher productivity, and enhanced efficiency.

We laid the foundations years ago by creating presses that were connected online and analyzing the data to boost performance and availability. Today, we offer you an entire ecosystem for digitizing value creation at print shops. As well as smart services such as predictive maintenance. You also benefit from trendsetting business models such as pay-per-outcome. Under this model, HEIDELBERG provides all the necessary equipment, software, consumables, and services. You simply pay for the number of sheets printed – for "productivity on demand" that can be flexibly adapted to your requirements. We call this "Simply Smart".



## Contents

04 Speedmaster XL 75

06 Optimizing OEE increases profitability

08 The HEIDELBERG User Experience on the Speedmaster

09 The facts at a glance

14 Productive short runs

15 Always the right solution

16 Peak performance UV solutions

18 10 clear benefits

19 Your dialog with HEIDELBERG



# The success. **Speedmaster XL 75.**

With its modern design, the Speedmaster® XL 75 is tailored towards ergonomic operation and your requirements. This future oriented press in 50 × 70 format delivers high efficiency, productivity, and ease of operation.

Experience undreamt-of performance. With Push to Stop, the efficiency of print production (OEE) can be raised to a level that has been difficult to achieve in the past. The Intellistart<sup>®</sup> 3 assistance system revolutionizes your job changes with comprehensive, time-optimized automation.

Push to Stop and the implementation of artificial intelligence offer you a unique user experience (UX): autonomous and navigated printing across the entire printing process. Intelliline can be used to visualize the respective machine states. Machine operation is now easier than ever – the HEIDELBERG User Experience of the Speedmaster will inspire you.

The Speedmaster XL 75 offers you maximum flexibility thanks to extensive configuration options for the most demanding requirements in commercial, label, and packaging printing The result is a machine that adapts to changing market requirements. Top quality with maximum availability – you can rely on that.

Speedmaster XL 75 - simply successful.

## Greater success in the market for small and large printing companies. **Optimizing OEE increases your production profitability.**

With the Speedmaster HEIDELBERG offers you the most highly automated and most intelligent Speedmaster yet. The smart machines in the series take advantage of the huge spectrum of digital possibilities for outstanding productivity and a significant increase in overall equipment effectiveness (OEE). The clear focus on operator-independent performance on the Speedmaster raises the Push to Stop philosophy from HEIDELBERG to a whole new level.

#### From the smart printing press to the smart print shop to the smart printing industry

Digitization is changing the printing industry. HEIDELBERG is making use across the board of the far-reaching optimization potential of digital technologies in the enhancement of its Speedmaster series with the objective of smart integration within the print shop and as part of a smart printing industry, where all stakeholders – print buyers, creatives, printing companies, service providers, and suppliers – are connected.

#### The future of industrial printing

Integrated communication along the entire process chain, paired with intelligent automation – this is the future of modern print production, whether for smaller businesses or large industrial printing companies. Intelligent production reduces complexity and speeds up processes autonomously. The key to this is digital connectivity with the Prinect® Workflow. Big data provides the relevant information for optimizing results and monitoring the processes on an ongoing basis. HEIDELBERG is setting standards in the area of the smart factory through the direct and complete integration of printing processes in industrial applications, and is thus driving the intelligently controlled production.

#### **OEE** – the key performance indicator for productivity

Overall equipment effectiveness is an important key performance indicator for assessing how effectively a production system is operated in practice. It is made up of the factors of availability, performance, and quality. The average OEE across all format classes is currently around 20 percent, and even the Speedmaster XL 106 from the Push to Stop generation, with an average OEE of 27 percent, still offers considerable improvement potential, since the OEE that can realistically be achieved is much higher.

This is proven by Speedmaster presses operating with an OEE of 50 percent and up. The average productivity is expected to double in the coming years. With up to 90 million printed sheets a year, the first Speedmaster users are already showing what is possible.

#### **Increasing overall equipment effectiveness (OEE)** Significant reduction of process-dependent and operator-dependent downtimes through Push to Stop.



Overall equipment Process-dependent — Machine's realistic effectiveness and operator-de- performance limit

 $^{\star}$  OEE analysis 2020 using the example of a Speedmaster XL 106 and a run of 4,600 sheets

pendent losses

#### Exploiting potential: focusing on the yellow bar

(OEE)

In order to increase the OEE of the machines, existing improvement potential must be activated. Around half of this potential is tied to technical aspects (gray bar in graphic). However, technical improvements will not necessarily result in success – only if the organizational aspects are improved at the same time. The other half of the potential relates to processes and operators (yellow bar in graphic). This is precisely where HEIDELBERG concentrates its activities.

#### Process improvements and operator-independent solutions with Push to Stop have a direct effect on the OEE

Improvements that act on the yellow bar, in other words on the processes and operators, have a direct influence on the OEE. This is where the greatest potential lies. With Push to Stop, more extensive process automation, and intelligent assistance systems, the Speedmaster presses enable even more comprehensive navigated and autonomous printing. Speedmaster: clear focus on operator-independent performance through intelligent automation.

- Close automation gaps
- Intelligent assistants for navigated printing
- Digital integration and use of digital data
- Potential of AI ensures optimal use of resources and highly effective production

The machine's intelligence minimizes the operator's influence on performance. Productivity is increased, processes are sped up, and become plannable and reproducible. The operator is navigated through the processes at a modern and attractive workstation, and in this way is better equipped to handle the greatly increased day-to-day requirements. Push to Stop on a new level – for optimized overall equipment effectiveness on all Speedmaster models.

## Printing has never been so easy. The HEIDELBERG User Experience.

Immerse yourself in the world of the HEIDELBERG User Experience (UX): completely rethought and clearer than ever before, it sets new standards for the user experience on the Speedmaster. The Prinect Press Center® XL 3 with the Speedmaster Operating System simplifies operation through one-of-a-kind navigation and innovative assistance systems, thus ensuring predictable results and increased performance.



#### A clear view for quality and precision

HEIDELBERG UX is the holistic and intuitive operation of all HEIDELBERG touch points. Intelligent assistants and a uniform user interface reduce complexity and simplify production processes.

#### Focus on you, the user

The Speedmaster Operating System with intuitive touch control turns the convenient control of the Speedmaster into an experience. Settings can be called up with a click, and the scalable operation can be flexibly adjusted in accordance with the requirement profile. Intuitive operator guidance, innovative gesture control, and integrated help functions eliminate lengthy searches.

The Speedmaster Operating System delivers fast, simple and navigated use of all your machine's functionalities.

#### The most intelligent Speedmaster yet

Integrated assistance systems make your work easier. They look after routine tasks and ensure reproducible results.

#### Push to Stop – reliable performance through one-of-akind navigation and automation

For the first time, navigated printing with Push to Stop is possible on all Speedmaster machines. Intellistart 3 defines all the steps required for the job change without any operator intervention and provides maximum transparency across all active and queued processes. Intelliguide<sup>®</sup> simulates the time-optimized sequence live and, if necessary, also includes the steps to be executed manually.

#### **Everything at a glance**

The Wallscreen XL completes the one-of-a-kind operator navigation for the highest performance demands. Intellirun, the dynamic production view, shows the operator the right view at the right time, fully automatically, and provides intelligent information on the current production status. Intellirun thus not only supports you during the automated job change, but also throughout production.



Modern working environment at the Prinect Press Center XL 3 with 24-inch multi-touchscreen and LED daylight lamp for optimum sheet coordination.



Intelliline offers one-of-a-kind assistance and transparency at the machine and navigates you through any manual steps required.

For the first time, all production steps are supported by an up-to-date overall view. The feeder display also shows important job information for optimal integration of the helper.

The **Intelliline LED-based navigation support** extends this logic to the machine. The resulting expansion of the Intelliguide, Intellistart 3, and Intellirun process displays provides a color visualization of the unit status on all printing, coating, and drying units on the operator and drive sides. You can keep an eye on everything at all times and are prompted when intervention is required.

What this means is a new era of navigated and autonomous printing with Push to Stop. Uninterrupted productivity with the fully automated job change – from the last sheet to the first good sheet and the start of production.

#### Perfect data and color management with Prinect

The Prinect Press Center XL 3 links the printing press to the print shop's Prinect Workflow. Job data can be transferred and also made available in an automatically defined sequence. The production data is returned fully automatically. This enables you to benefit from excellent data management, one-of-a-kind presettings, up-to-date production data, and informative reports. The Prinect Inpress Control 3 inline color measurement system stands for high productivity. The powerful Prinect Axis Control and the Prinect Image Control 3, which measures the entire print image, also offer you optimal, reproducible color stability and minimum paper waste. All color measurement systems are perfectly integrated into the workflow via the central color database and provide automated color reports.

#### Simply – fast – reliable: the HEIDELBERG UX on the Speedmaster XL 75

Experience the HEIDELBERG UX on the Speedmaster XL 75 also. Every time you operate a component you are experiencing the Peak Performance concept. From the seamlessly ergonomic design, to the pioneering touchscreen control panels, the simple handling of the washup devices to the unique preset functionality, the Speedmaster XL 75 delivers an unparalleled user experience.

## Outstanding characteristics. **The facts at a glance**.



#### **Highlights:**

- High-performance control station Prinect Press Center® XL 3 with innovative, process-oriented operator guidance system Intellistart 3.
- Intellistart 3, the process- and job-oriented assistance system for efficient job preparation and automatic generation of time-optimized job change programs.
- High flexibility for a wide range of substrates from 0.03 to 0.8 mm. A maximum substrate thickness of up to 1.0 mm is available for special applications. All kinds of substrates such as metal-laminated materials, foils, labels, and cardboards can be processed.
- Using preset values, the entire sheet transfer system adapts to the substrate and enables fast setup, high production speeds, and reliable, continuous production.
- The AirTransfer system for straight presses and the variable AirTransfer system for perfecting presses ensure perfect, contact-free sheet travel.

- Shorter makeready times thanks to fully automatic plate changes with AutoPlate Pro and AutoPlate XL. Precise plate feeding and identification quickly lead to exact register. The operator can perform other tasks while the plates are being changed.
- Spectrophotometric inline color measurement system Prinect Inpress Control 3 automatically measures and controls color and register on the fly and at all speeds.
- Washup devices for the inking unit and blanket and impression cylinder for optimum washing results. The Wash Assistant determines the optimal washup program for short and effective washing.
- Auto Protect fully automatically supplies unused printing units with roller protection liquid and protects the rollers in the long term.
- Time and cost savings thanks to production speeds of up to 16,500 and 18,000 sheets per hour on straight presses ensure fast job processing, even with longer runs. Special accessories make it easier to achieve high printing speeds, even with difficult substrates.

The Speedmaster XL 75 is setting new standards in its format class. A highlight is the HEIDELBERG User Experience, which features unique navigation and comprehensive assistance systems. The innovative technology offers you a high level of automation, optimal ergonomics, easy operation, short makeready times, and stable processes. Printing made easier than ever before.



- The perfecting device with fully automatic adjustment guarantees precise registration and gentle sheet guidance at a maximum speed of up to 15,000 sheets per hour.
- The coating unit with chamber blade system ensures uniform coating application. Automated coating plate and blanket changes cut down on makeready times.
- The DryStar<sup>®</sup> dryer technology provides the right dryer for every application. Fast postpress and special applications provide differentiation and an extension of the application range.
- The presettable delivery air system with honeycomb grid ensures optimal distribution of the air flows and precise delivery of different materials.
- The modular press concept permits a flexible combination of coating, printing, and perfecting units for economical inline production through to complex applications.

• The large cylinder diameter and the sturdy and ergonomic design of the press ensure maximum running smoothness and ease of operation.

You can find more about technical data and facts here: heidelberg.com/xl75/technical-data

heidelberg.com/xl75-anicolor/technical-data

**Prinect Workflow.** One for all!

Prinect Business and Prinect Production merge all print production stages into a single, end-to-end process – from costing to prepress, press and postpress right through to invoicing. Reduce complexity, boost your profits: With Prinect, you can access all workflow functions while only paying for the volume you actually produce, rather than for individual licenses.

Find out more: heidelberg.com/en/prinect



Perfect piles thanks to the Preset Plus delivery ensure smooth postpress operations.



The coating unit permits outstanding coating and drying results, even at the highest speeds.



The inking and dampening unit permits stable coloring throughout the entire run.



Speedmaster XL 75-8-P+LYYL with FoilStar. The press shown is a sample configuration. Some of the equipment features mentioned are optional.

#### Preset Plus feeder

• The Preset Plus feeder looks after all the relevant format and air settings for the shortest makeready times and steady sheet travel when changing materials.

#### 2 Cold foil module

• The FoilStar® offers inline finishing with cold foil application using two offset units.

#### 3 Perfecting device

- The perfecting device with fully automatic adjustment guarantees precise registration and gentle sheet guidance across a wide range of substrates, from lightweight materials up to substrate thicknesses of 0.8 mm.
- The variable AirTransfer system with dynamic sheet spacing control provides contact-free sheet travel based on a characteristic profile, ensuring outstanding print quality in straight printing and perfecting.
- The PerfectJacket<sup>®</sup> and TransferJacket Blue cylinder jackets guarantee optimum print quality in straight printing and perfecting.

#### Inking unit and dampening unit

- The inking unit and dampening unit are responsive, color stable, and permit fast color changes. Relevant functions can be remote-controlled, including the short-path inking function with minimal ink consumption.
- Precise presetting of the color profile enables a fast start of production. Color Assistant Pro fully automatically adapts the ink presetting.
- The Vario function avoids hickeys during the production run.

#### **5** Plate changing system

· AutoPlate Pro and AutoPlate XL ensure precise and fast plate changes.

#### 6 Sheet travel

 The AirTransfer system with Venturi nozzle technology ensures contact-free and gentle sheet travel.

#### **7** Washup devices

- Program-controlled blanket washup devices for blanket and impression cylinders with extremely short washing times combined with outstanding washup results.
- Wash Assistant enables automatic selection of the optimal washup program for the inking unit and blanket and impression cylinders based on the level of soiling.



The perfect sheet travel ensures peak performance from the feeder to the delivery.



Fully automatic plate changes with AutoPlate Pro or AutoPlate XL.



Fully automatic switchover of the Preset Plus feeder ensures the fastest material changes.





**Push to Stop.** The key to the Smart Print Shop.

#### 8 Prinect Inpress Control 3

• The integrated measurement system measures and controls register and color inline during production, and by so doing reduces makeready times and waste sheets.

#### 9 Coating unit

- The coating unit with chamber blade system and a wide range of coating supply and screen roller technologies enable outstanding coating results for diverse applications.
- Automated coating plate changes ensure quick and easy coating plate and coating blanket changes.
- · Easy screen roller and coating changes further enhance the flexibility.

#### 10 Dryer systems

- Drying units and UV interdeck dryers permit flexible drying downstream of the printing or coating units.
- The various DryStar systems are optimally matched to the sheet travel and ensure the best drying results.
- · Tool-free removal of the dryer systems for good accessibility.

#### **11** Preset Plus delivery

- The Preset Plus delivery forms piles with neatly aligned edges. All settings are made automatically here by adopting the presetting data.
- The dynamic sheet brake places even critical materials on the pile in a safe and controlled manner.

You can find more about the details of your Speedmaster here: heidelberg.com/en/xl75

heidelberg.com/en/xl75-anicolor

#### **HEIDELBERG** contracts.

Contract packages as individual as your requirements.

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

Ð	Find out more:
	heidelberg.com/contracts

## Speedmaster XL 75 Anicolor 2. **Productive short runs.**

The Speedmaster XL 75 with Anicolor 2 zoneless short inking unit is designed to guarantee you high productivity, especially with short runs – for fast and cost-effective production in 100 percent offset quality.



#### The Anicolor 2 technology

The inking unit of the Speedmaster XL 75 Anicolor<sup>®</sup> 2 consists of a single-speed screen roller with ink chamber blade. The ink is transferred from the screen roller to the printing plate by an ink form roller. The ink density can be markedly changed and adapted to a wide range of substrates and spot colors by adapting the temperature and activating the Anicolor booster.

#### Economical even with short production runs

Even short production runs can be economically produced with the Speedmaster XL 75 Anicolor 2. The fast and constant inking means that print jobs are ready for production after just a few sheets. With longer runs, you benefit from the advantages of the offset technology.

#### Benefits at a glance

- · Cost-effective production of very short runs
- Shortest makeready times
- Cost savings thanks to least possible paper waste
- High standardization and automation of the printing process
- Fast, uniform inking and high production stability
- $\cdot$  Wide variety of substrates
- Printing of spot colors, metallic colors, and UV or special coatings

#### **Market-specific solutions**

One of the main areas of application of Anicolor 2 is commercial printing, where the Anicolor technology provides the optimal solution for fast and economical printing of very short runs.

In label and packaging printing (e.g. in the pharmaceutical or cosmetic industry), Anicolor 2 opens up huge savings potential for very short production runs. Spot colors can be changed extremely quickly or replaced by means of the Multicolor workflow.

## Configured for your requirements. Always the right solution.

Whether printing high-end commercial print jobs, packagings, or labels, the Speedmaster XL 75 gives you flexibility. The variety of configuration options and the HEIDELBERG User Experience make it easier than ever for you to optimally meet your customers' most demanding requirements.



#### **Commercial printing**

Traditional commercial printing covers a wide product range with short and medium runs. Mainly mid-sized print shops meet these challenges using a Speedmaster XL 75 specially adapted to the job type. General print shops in particular benefit from the flexibility of the press thanks to the wide range of substrates with thicknesses of up to 0.8 mm, including in perfecting mode. Coating applications enable fast drying and special effects.

#### **Packaging printing**

High-quality packagings for cosmetics and pharmaceuticals are mostly produced in 50 x 70 format, especially small packaging and batch sizes. A wide range of configurations are used, from Speedmaster XL 75 four-color presses through to machines with 15 units – with UV equipment and double coating. These achieve a high level of embellishment.

#### Label printing

Presses for printing high-quality labels have to meet very special requirements. Most label printing applications involve thin substrates. Wine, spirit, and beer labels also frequently call for shiny or metallic effects. With the StaticStar<sup>®</sup> Advanced anti-static package and the foil package, you can process thin materials and foils without any problems. Shiny effects can be achieved inline with the cold foil module FoilStar and UV coating.

#### **Special applications**

The Speedmaster XL 75 can also handle particularly challenging printing tasks. It provides efficient production of printed items beyond plastic cards like membership cards or plant tags, for example. The high-end machine is also ideal for sensitive applications like security printing, for example the production of personal IDs or bank cards. Multiple inks can be used simultaneously in one ink foundation with the Iris ink fountain, and color vignettes can be printed without any transitions.

## For brilliantly fast jobs. **Peak performance UV solutions.**

Equipping your Speedmaster XL 75 with different UV systems increases your options in terms of your range of services and the performance of your press. You have greater flexibility in the choice of substrate you can use, and can offer your customers a wide range of special effects in order to win lucrative jobs.

#### Expanding the range of applications

You can offer your customers the entire range of special effects such as matt gloss effects, pearly luster effects, metallic effects, etc. and at the same time reduce the throughput times in your print shop. In addition, you increase the choice of substrates since plastics and natural papers can also be used.

In times of short production runs and fast turnarounds, having the sheet arrive dry in the delivery for immediate forwarding to postpress is a huge advantage, particularly for commercial printers and web-to-print providers.

#### Saving energy with complete flexibility

The UV system is fully integrated into the operating concept of the press and precisely coordinated with its performance features. Regardless of whether based on lamp or diode technology, UV systems deliver the most efficient energy use and complete flexibility thanks to the ability to select the position of the interdeck dryers. The slide-in dryer modules can be changed without the need for tools, which shortens the makeready times when changing jobs. Mixed-operation applications are also possible with both technologies, and are another way to fully expand your range of applications.

#### **DryStar UV**

With this system, packaging, label and security printers produce the full range of effects on a hugely diverse range of substrates.

#### **DryStar LE UV**

Sheets produced using an LE UV system are instantly dry, and can go straight into postpress. This technology helps commercial printers, in particular, to process small runs with fast turnarounds quickly and efficiently. In addition, a wider range of substrates can be processed and more special effects offered than in conventional production.

With the DryStar UV and DryStar LE UV, the Instant Start software cuts waiting times when changing jobs. The bulb, reflector, and shutter technology of both systems has been designed to get the most out of the energy used. The benefits of this for you are a longer bulb lifespan and reduced energy consumption when the system is in standby mode.



#### **DryStar LED Pro**

The DryStar LED Pro generation has further increased the performance of LED drying, and handling has been optimized once again. The precise focusing of the light and the optimal distance from the sheet travel give you a perfectly dry sheet. Maximum energy efficiency without any radiant heat in the press delivers the best possible production conditions at low cost.

No power is consumed in standby mode (makeready times, washing times) thanks to the Instant On/Off system. The power consumption is further minimized by the timing of the diodes based on the format length. The Auto Format setting only activates those diodes actually required for the format width.

The sophisticated temperature and power management guarantees a long service life, even after up to 20,000 hours of operation.

 You can find more about the DryStar UV technologies here: heidelberg.com/en/starsystem

## Leader in the printing process. **10 clear benefits.**



## Simply get in touch. Your dialog with HEIDELBERG.



We hope this brochure has inspired you. Our aim is to make you even more successful in the future, so feel free to contact us with your questions and suggestions. We're only ever an e-mail or phone call away.

#### We look forward to hearing from you!

Whether you're just curious or have specific things you'd like to ask, simply send an e-mail with your questions, requests, or comments to

#### info@heidelberg.com

or use our contact form at

#### heidelberg.com/info

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#### **Production note**

Image credits: Heidelberger Druckmaschinen AG Platemaking: Suprasetter Printing: Speedmaster Finishing: Stahlfolder Consumables: Saphira **Printed in Germany** 

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For details on the emissions of the Speedmaster XL 75, please visit us at heidelberg.com/emissiondetails

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#### Version Jan 2024

