Speedmaster XL 105

HEIDELBERG

Equipment	XL 105 4–10	XL 105 4–10+L	XL 105 4–10 UV	XL 105 4–10+L UV	XL 105 4–10+LYYL
Prinect					
Prinect Press Center	•	•	•	•	•
Prinect Image Control	○	○	○	○	○
Prinect Axis Control	○	○	○	○	○
Prinect Inpress Control	○	○	−	−	−
Feeder					
Foil package	○	○	○	○	○
Suction brush	•	•	•	•	•
Printing Unit					
AutoPlate Advanced	•	•	•	•	•
AutoPlate XL	○	○	○	○	○
Second washup solution circuit for hybrid operation printing units	−	−	○	○	○
InkStar	○	○	○	○	○
Coating unit					
Chambered blade system	−	•	−	−	−
Pressurized chambered blade system	−	○	−	•	•
Multi Loader System	−	○	−	○	○
Dryer					
DryStar Ink	○	−	−	−	−
DryStar Combination	−	•	−	−	−
DryStar UV	−	−	•	•	−
DryStar Combination UV	−	−	−	○	•
Delivery					
Dynamic sheet brake	○	○	○	○	○
Delivery extended by 80 cm (31.50 in)	−	−	•	−	−
Delivery extended by 160 cm (62.99 in)	−	•	−	−	−
Delivery extended by 240 cm (94.49 in)	−	○	−	•	•
Additional equipment options					
CutStar	○	○	○	○	○
Elevated press 525 mm/875 mm (20.67/34.45 in)	○	○	○	○	○
Automatic non-stop feeder with Autopile*	○	○	○	○	○

The combination of individual features may differ from country to country.
This list only represents a selection of available features.
○ Optional   • Standard   − Not available
* only with presses elevated by 875 mm (34.45 in)

Solutions from a Single Source.
Unleashing the Potential of Your
Speedmaster XL 105.

Comprehensive service portfolio for maximum productivity. When incorporated into a perfectly integrated system of processes and production equipment, the Speedmaster XL 105 will help you tap into the full potential of the press. Heidelberg therefore offers you a comprehensive solutions portfolio that you can tailor to your own specific requirements.

High-end services from Heidelberg Systemservice. End-to-end maintenance programs help to avoid downtimes, while consultancy and color management services raise productivity and the quality of the process chain. Combining these and other beneficial services into service contracts makes it far easier for you to perform costing – even possible right from the outset using e.g. with the Systemservice 36plus package. Using Original Heidelberg Service Parts ensures your Heidelberg press remains a Heidelberg press. Assured quality, a unique logistics system and competitive prices all help deliver trouble-free operations and high value retention for your press. We also offer you our Remote Services, which cut downtimes and costs through rapid user assistance, remote diagnostics and remote inspection. Talk to your Heidelberg contact to find out about the services that are available in your area.

We meet your training needs, too. The user training courses at the Print Media Academy show you how to make the most of your press.
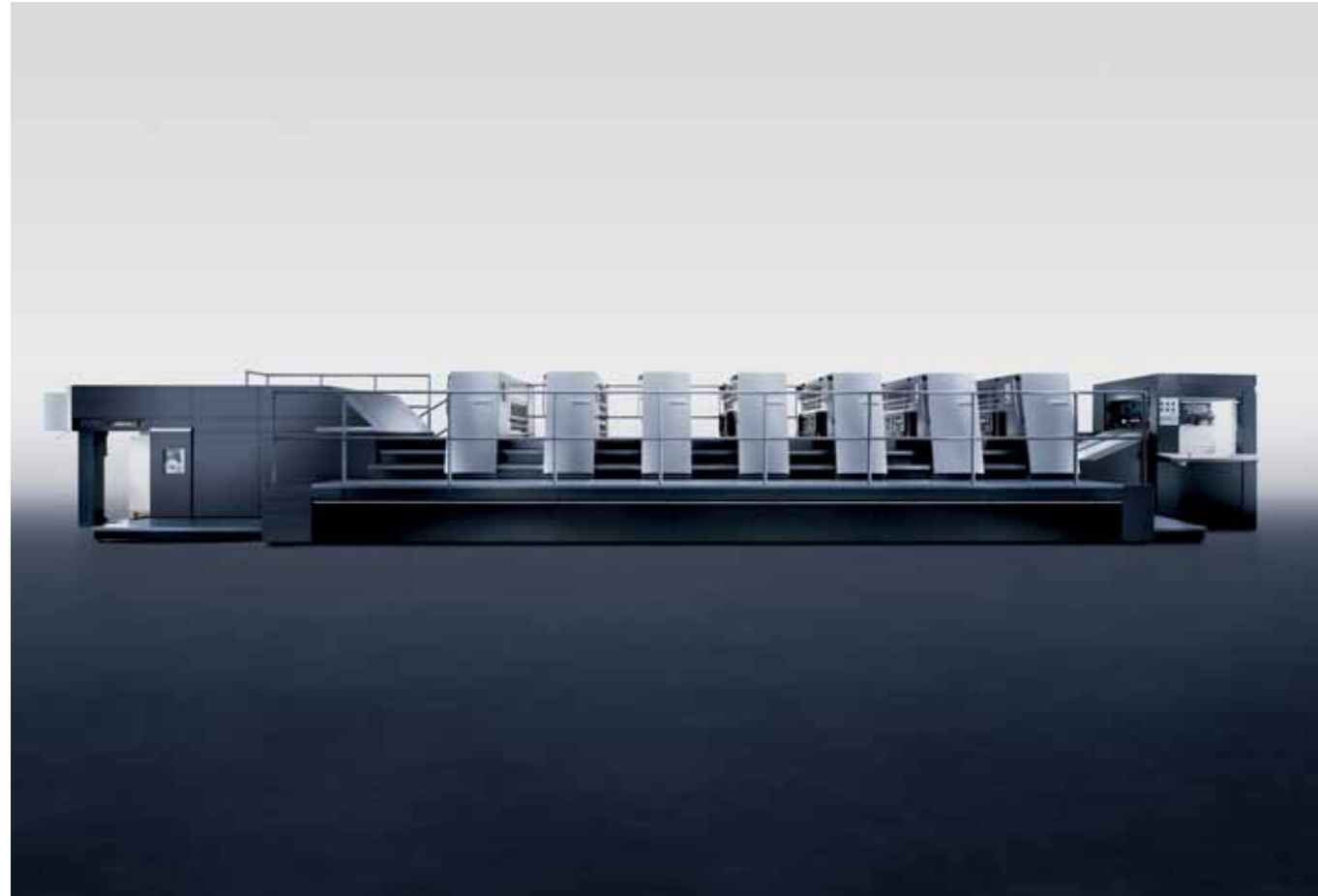
Broad range of consumables for the best results. Pick what you need for your production operations from the wide range of Saphira® consumables for your Speedmaster XL 105. All our consumables have been carefully selected and tested to ensure you get maximum performance from your press and best quality for your end products. We also make sure Saphira consumables meet the latest industry standards for environmental friendliness, as these benchmarks play a key role in the development of all our products and solutions.

Seamless workflow integration for faster print processes. As a solutions provider for the print media industry, Heidelberg offers you a whole range of opportunities to fully unlock the potential of your Speedmaster XL 105 through workflow integration. By integrating your press into the Prinect workflow, presetting data can be captured from prepress and administration and feedback reports can be generated in real time in your printshop's management systems.

Peak Performance Class.
The Pioneering Performance Class for a Discerning Market. The Speedmaster XL 105 Sets Benchmark Standards in Offset Printing.
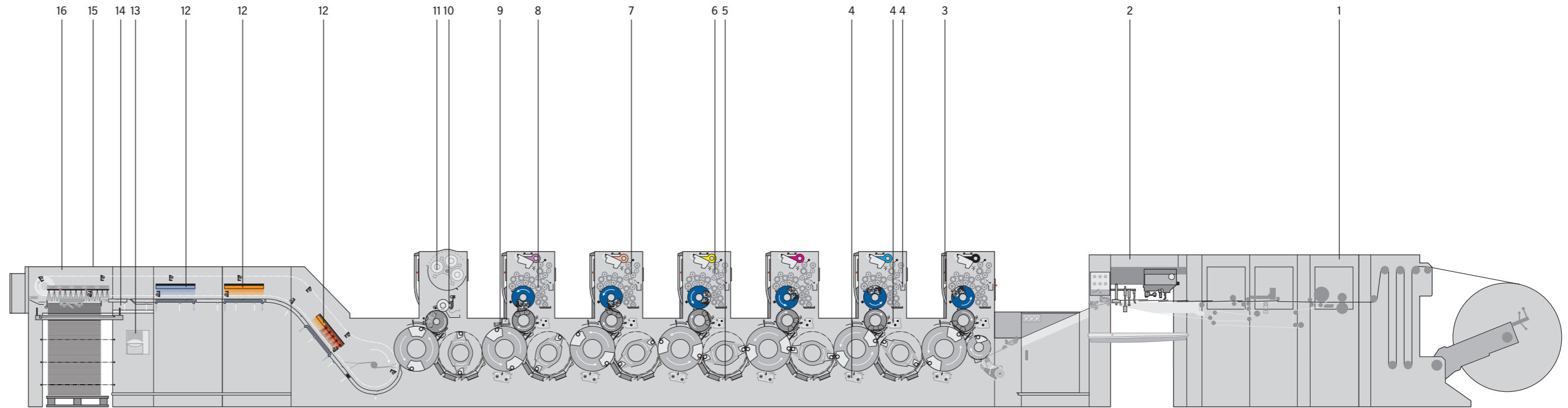

Peak Performance Class – designed to meet the most sophisticated requirements.

The market and its customers are demanding more.
For several years, the use of multiple colors, coatings and special effects has increased dramatically throughout the packaging, label printing and high-end commercial markets. Because your customers want to stand out from today's crowded marketplace they are making ever greater use of all the special effects that can be applied to printed matter. From spot colors, to a whole range of coating types such as UV coatings and unusual printing stocks – customers are demanding top quality at cost-effective prices. What's more, there is also a growing trend towards ever shorter print runs and frequent job changes. Long makeready and setup times and large volumes of waste inevitably lead to high costs.
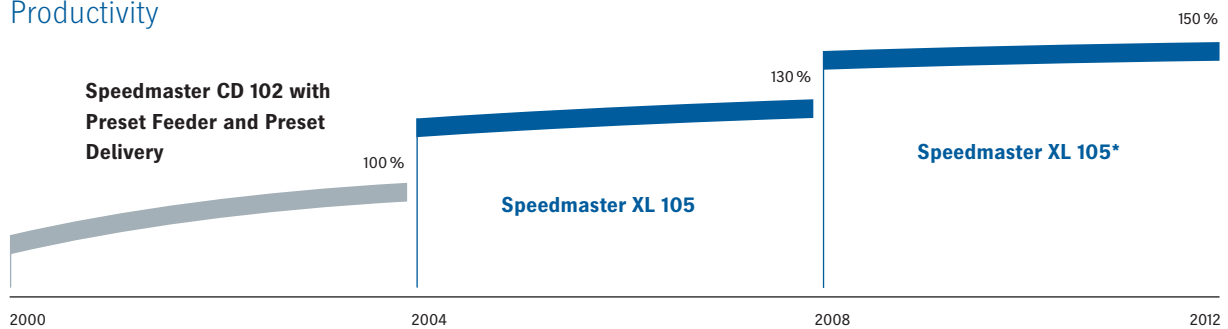
Inside View Speedmaster XL 105

The press shown here is a sample configuration. Some of the features shown are optional.

1 The CutStar sheeter with CAN connection combines the cost benefits of reel stock with the versatility of sheetfed offset printing.

2 The Preset Plus Feeder adopts all relevant format and air settings using presettings in order to achieve reduced makeready times and stable paper travel.

3 AutoPlate Advanced provides fully automatic, sensor-controlled staggered plate removal.

4 The programmable washup devices for the inking and dampening system and the blanket and impression cylinders deliver optimum cleaning results.

5 The AirTransfer system and its Venturi nozzle technology ensure smooth sheet travel.

6 The Hycolor inking/dampening system equipped with Color Fast Solution software responds immediately to adjustments, thereby cutting makeready times.

7 The CombiStar inking unit temperature control system ensures constant temperature, thereby achieving stable printing quality over the entire run.

8 Short-path inking mode provides outstanding print results for motifs requiring low ink consumption.

9 Prinect Inpress Control automatically measures and controls color and register during production – directly in the press and at all speeds.

10 The pressurized chambered blade system with tri-helical engraved anilox rollers delivers an optimum, smooth coating surface at all speeds.

11 Multi Loader System, the motorized screen roller storage system, makes changing screen rollers quick and easy.

12 DryStar Combination with its infrared, hot air and circulated air modules has been specifically designed to complement sheet travel – for outstanding drying performance.

13 PowderStar AP 500 provides efficient powder application.

14 The presettable dynamic sheet brake decelerates sheets safely and in a controlled manner.

15 By capturing presetting data, the Preset Plus Delivery ensures high-precision pile formation with extremely short makeready times.

16 The CleanStar process air cleaning system minimizes odor and dust levels in the production environment.

Productivity

Speedmaster CD 102 with Preset Feeder and Preset Delivery

Speedmaster XL 105

Speedmaster XL 105*

150 %

130 %

100 %

2000   2004   2008   2012

Since its introduction in 2004, the Speedmaster XL 105 has proven that it can deliver the increased productivity that customers expect in day-to-day operations.
As a result, the Speedmaster XL 105 has helped our customers achieve productivity gains of up to 30 percent and more.
*The Heidelberg innovations Prinect Press Center, Prinect Inpress Control and AutoPlate XL can boost productivity by a further 20 percent.

Times are changing in the industry. The industrial printshop sector is undergoing something of a concentration process, with corporate takeovers, collaborations and specializations become increasingly commonplace. Cut-throat competition is fierce. The only viable option is to actively work against these trends. Safeguard and expand your customer base by combining high quality and flexibility with exceptional cost efficiency.

The optimum solution in the high-end sector is here now. The Speedmaster® XL 105 enables you to meet even the most exacting of customer requirements because Speedmaster XL presses are in their own unique performance class. The Peak Performance Class satisfies the most stringent demands on quality and top productivity. From the feeder to the delivery, the Speedmaster XL 105 is bristling with innovations.

The high-performance Prinect Press Center™ control station and the Sheetfed Control, patented decentralized control platform, offer you a decisive technological edge when it comes to press control. Thanks to its productivity and cost efficiency, this extraordinary press raises the bar to an all-new high through technology that inspires.

The press that adapts to your needs. The many configuration options of the Speedmaster XL 105 enable you to customize the press to your own needs – from four-color to ten-color, anything goes. Expand your production horizons with the fully integrated UV technology. You can utilize even more, high-quality surface finishing options by choosing a Speedmaster XL 105 with one or two coating units. Special applications can also be achieved using the Speedmaster XL 105 Duo or the FoilStar cold foil module.

The wide-ranging configuration options of the Speedmaster XL 105 cover practically every single need of the industrial printshop. Whether in packaging, label or commercial printing, the Speedmaster XL 105 sets new benchmarks in all areas.

Cutting-edge technology that respects the environment. When developing our presses, we strive to build in performance characteristics that minimize the environmental impact, for example energy efficiency, a long service life, reduced consumption levels and low emissions. Equipment such as cloth washup devices that reduce the consumption of washup solution, extraction systems for powder, ozone and ink mist, and innovative Star products make the Speedmaster XL 105 an environmentally sound press.

This information and all subsequent details are dependent on press configurations, job structures and in-house processes.

Working in Perfect Harmony for Your Success. From Feeder to Delivery, the Speedmaster XL 105 Has Been Designed for the Ultimate in Performance.

Full automation minimizes makeready and throughput times.

The Speedmaster XL 105 – each individual subassembly raises your productivity. The Speedmaster XL 105 has been designed with your success in mind. High print speeds and outstanding print quality will raise your production standards to a new level. The end-to-end design concept of the Speedmaster XL 105 achieves peak performance across the board.

Peak performance works entirely to your advantage. The 75 × 105 cm (29.52 × 41.34 in) format gives you more room to show what you can do. Each individual component has been designed to ensure a constant production speed of 18,000 sheets per hour, without compromising quality in any way. Another winning factor in your success is the press' extensive level of automation. The Prinect Press Center enables users to input format and air settings for the entire press using just three parameters (printing stock thickness, sheet length and sheet width). You benefit from extremely short makeready and setup times, not to mention reduced waste.

Faster makeready

Makeready times are reduced thanks to innovative developments such as the ability to input storable presettings for blast air and suction air in the feeder, sheet transfer and delivery. For example, if we assume that a printshop needs to change printing stock or format for every third job by saving five minutes during each changeover, the result will be as follows: With 1,500 jobs/year × 5 minutes the printshop saves 125 hours per year. Moreover, the ability to store data ensures outstanding time savings for repeat jobs.

Capacity

A high level of automation and production speeds of up to 18,000 sheets per hour combine to boost productivity by up to 30 percent because almost all print jobs can be processed at this maximum speed. An increase in net production speed of up to 2,500 sheets per hour delivers time savings of several hundred hours each year. This free time can be used to handle additional jobs.

The High-Performance Control Station. Experience a New Dimension in Efficiency and Ease of Use.

The ideal operating and control center for the Speedmaster XL 105.

More than just a control station. The Prinect Press Center is the ideal tool for controlling your Speedmaster XL 105. All processes, from job preparation to machine setup and checking the print sheet, can be executed faster, more accurately and with greater certainty than ever before. The carefully conceived ergonomics of the Prinect Press Center are reflected in both the design and the innovative operator guidance. Pioneering technology, time-saving automation functions and perfect data management lay the foundations for sustainable efficiency and provide the investment security that the printshop of today and tomorrow needs.

The ultimate operating and control center. Based on Sheetfed Control – the patented, decentralized control platform from Heidelberg® – the Prinect Press Center brings together the press control system and remote color and register control in one central console. Sheetfed Control offers you all the benefits of maximum availability, comprehensive diagnostic options and a high level of automation.

Properly equipped. The standard daylight lamp provides optimum illumination for the console. A generously proportioned sheet deposit area creates the ideal environment for checking results.

Ultimate ease of use at the delivery. The Preset Plus Delivery is equipped with both a touchscreen and jogwheel. The touchscreen can be used to rapidly select and adjust the delivery blast air, overdampening, dryers and powder application. Rotating the jogwheel enables you to fine tune all air settings. These digitally stored values can be retrieved when processing repeat jobs.

Fast and reliable – Intellistart. The Prinect Press Center depicts the relevant workflows in an extremely straightforward format and features intuitive menus that guide the user through the various work processes. Easily understandable lists, clear status reports and the immediate notification of input errors all combine to ensure that production is smooth and reliable.

The innovative, process-oriented operator guidance Intellistart can boost the productivity of your Speedmaster quite significantly. While one job is being processed, you can already be preparing the next. By intelligently using all relevant data from the current job and the next one, up to 70 percent fewer steps are needed to set up the press for the subsequent job. You will save at least one minute on each job change compared to previous makeready times. Depending on the number of jobs and their complexity, you can raise your annual production capacities by up to eight percent.

The wallscreen delivers an innovative edge. A large-scale monitor integrated into the extraneous light shield provides a unique overview of all press operations. The Speedmaster XL 105 is depicted in cut-out profile with all functions dynamically simulated. The wallscreen not only delivers 100 percent transparency, it also functions as an impressive tool for print approval processes. It depicts the width of the print sheet in actual size relative to the ink zones, with each color separation being displayed separately if you wish. You can also use the wallscreen to control and operate a whole range of additional applications, including Prinect® Cockpit or the Machine Component Scout from Heidelberg.

Control station and color measuring system form a single unit. The interaction between the control station and the color measuring and control systems Prinect Axis Control®, Prinect Image Control and Prinect Inpress Control ensures ultimate integration into the workflow. Together with the Prinect Press Center they form an optimally integrated unit. Setting data is adopted directly. You can use measuring results immediately to help you ink up and get into register quickly and counter any possible deviation from reference values.

Prinect Inpress Control automatically measures and controls color and register on the fly – no matter what the speed. Integrated directly into the press, a spectrophotometric measuring device at the last printing unit measures process colors, spot colors and register in the quality control strip.

Prinect Inpress Control speeds up the makeready process and reduces paper waste. Productivity increases because there is no need for sheet pulls. Fully automated monitoring also makes sure that a high level of color stability is maintained throughout the entire job.

The advantages for your printing process:

• **Makeready times:** The Prinect Press Center means you have 70 percent fewer work processes and therefore gain an extra minute and more for each job change. Prinect Inpress Control enables you to cut makeready times by a further ten minutes. • **Productivity:** The Prinect Press Center enables you to raise capacities by up to eight percent each year depending on the number of jobs and their complexity. • **Quality:** The optimally integrated control station and color measuring system create a unique quality assurance system. • **Integration:** Fully integrated into the Prinect workflow, you can benefit from the ultimate in data management at your control station.

A Perfect Start Equals a Competitive Edge.
The Preset Plus Feeder Creates the Ideal Conditions for Achieving the Optimum Printing Process.

Get your production processes off to a good start with the Preset Plus Feeder.

Optimum results from the very outset with the Preset Plus Feeder. Due to its high levels of automation, the Preset Plus Feeder is the first step in a successful production process. All key settings can be preset, and the vast majority of manual operations can be avoided. This both saves time and lends printshops a competitive edge.

Automatically set for success. The high-performance suction head, central suction tape and pneumatic pull lays are integrated in such a way that manual setting is largely unnecessary. This effectively reduces makeready times.

Designed for top speed. The Preset Plus Feeder is designed for high and reliable production speeds across the entire range of materials from 0.03 to 1 mm (0.0012 to 0.039 in). For example, a speed-compensated rotary valve on the suction head ensures ultra-precise sheet separation. The multi-chamber design of the central suction tape can be adjusted for whatever suction air is required and delivers faultless and precise sheet feed into the first printing unit. Venturi nozzles located in the area of the front lays make sure that the sheet lies perfectly flat and support accurate orientation.

Integrated controls for stable production. The Preset Plus Feeder also has a multi-stage sheet monitoring system. The multiple sheet detector prevents multiple sheets being transported to the feed table. Just like the pull lay double-sheet detection system, the ultra-sonic double-sheet detection system also identifies sheets that are stuck together. Shingle stream control is recommended as an additional safeguard when processing cardboard. This system monitors the entire stream for irregularities such as tear-offs, thereby preventing any damage to the blankets.

Autopile provides automatic material flow. Autopile, the roller conveyor system for automatic pallet transport, ensures that the feeder receives an uninterrupted supply of printing stock and transports the pile of printed cardboard away from the delivery. When used in conjunction with the non-stop feeder, it delivers fully automatic pile changes at the touch of a button, with no need for manual intervention.

Non-stop device for continuous production. The automatic non-stop device makes changing piles far easier. You can activate all functions at the touch of a button. Manual intervention is no longer necessary. As a result, you can print long runs quickly and continuously – without needing to carry out time-consuming manual pile changes.

The Preset Plus Feeder at a glance:
- Fully automated for the specific format and printing stock adjustment of the entire feeder
- Air settings controlled by characteristic curves
- Central suction tape with air presetting values
- Speed-compensated rotary valve for sheet separation
- Automatic sheet arrival control
- Venturi technology makes sure the sheet is lying flat at the front lays
- Multi-stage sheet monitoring system
- Pneumatic pull lay for printing stock-friendly sheet alignment
- Autopile roller conveyor system for seamless paper supply and empty pallet removal at the Preset Plus Feeder
- Fully automated non-stop feeder for continuous production

The advantages for your printing process:

• **Makeready times:** Performed via presetting, automated feeder adjustment enables you to cut makeready times during format and printing stock changeovers by up to five minutes compared with presses with lower levels of automation. In the case of repeat jobs, stored settings help to reduce makeready times even further. • **Productivity:** The cutting-edge, ultra powerful feeder can easily cope with extremely high production speeds. It achieves stable production conditions for a broad range of printing stock. The CutStar sheeter enables you to process cost-effective reel stock. • **Quality:** You can attain an extremely high level of quality thanks to precise feed registration and even process scratch-sensitive materials successfully. • **Integration:** The central Prinect Press Center control system is incredibly easy to use and saves time. • **Environment:** The feeder helps safeguard the environment by reducing wastage, thereby saving on valuable resources.

Stable High Performance and Smooth Precision.
How the Printing Unit and Sheet Travel of the Speedmaster XL 105 Deliver Peak Performance in Terms of Quality and Productivity.

The high-precision sheet guidance system of the Speedmaster XL 105.

The printing unit that minimizes your makeready times. You even save valuable time when changing plates. The AutoPlate Advanced plate changer significantly cuts your makeready times thanks to its fully automated, staggered plate removal system.

The AutoPlate XL simultaneous plate changer, which mounts all printing plates at the same time, gradually increases your time savings from job to job. You can therefore change between jobs more quickly, which is particularly important when processing short runs and performing frequent job changes.

The gentle touch. The smooth running of the Speedmaster XL 105 contributes to the outstanding quality of print results. The side frame, which is manufactured in a single casting, and a specially developed cylinder bearing system form the basis for stable sheet travel.

Wash and save. The Speedmaster XL 105 has a programmable washup device for the inking and dampening unit, blanket cylinder and impression cylinder. To save time, the washup cloth can be changed on the fly. The cloth washup device for the blanket and impression cylinders needs practically no maintenance. Electronic monitoring signals that blankets have been changed over on time and that the washup cassette is sited correctly. Moreover, the low washup solution and water consumption of the washup operations is both economical and environmentally friendly.

Mark-free and register-accurate. The smooth sheet guidance system is a key factor in ensuring top print quality. Without coming into contact with your printing stock, the AirTransfer system and its Venturi nozzles smoothly guide each sheet from printing unit to printing unit on a cushion of air – right up to the delivery. A set volume of air, defined according to format and grammage, is used to transport each sheet at the optimum distance from the sheet guide plate. This ensures mark-free production.

Aerodynamic sheet guidance. Perfect aerodynamics in parts of the press such as the feed drum and gripper bars make sheet travel smooth and stable, even when using thin paper stock. Sheet transfer is performed through double-width transfer cylinders. A patented front spoiler prevents air turbulence under the sheet when processing thin stocks at high speed. The grippers have been designed as wing grippers and support the sheet edge. All these features deliver outstanding production stability and print quality.

Automation equals short makeready times. Once you have entered the format and material thickness, air settings for sheet guidance are automatically adjusted. These air settings are speed-compensated. Should you need to optimize settings, this can be done using the Prinect Press Center. These settings can then be stored with job data for any repeat jobs.

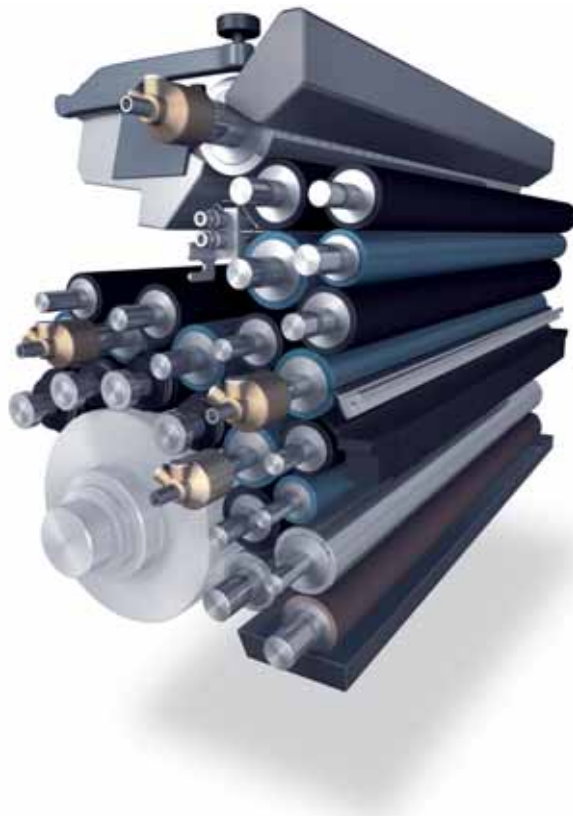**The printing unit and sheet travel at a glance:**
· Sturdy design for smooth operation
· Automatic washup devices
· AutoPlate Advanced automated plate changer
· AutoPlate XL fully automatic, simultaneous plate changer
· AirTransfer system with Venturi nozzles for contact-free sheet travel
· Automatic air settings for the sheet guidance system
· Aerodynamic sheet guidance for ultra-stable production
· Circumferential, diagonal and lateral registers can be remotely adjusted via the Prinect Press Center

The advantages for your printing process:
• **Makeready times:** The AutoPlate XL simultaneous plate changer helps you reduce the time needed to change the full set of plates. With a Speedmaster XL 105-8, a full plate change takes four minutes less than in a press fitted with AutoPlate Advanced. • **Productivity:** The greater the number of job changes and printing units in your press, the more you benefit from AutoPlate XL. Over 1,500 jobs, you can generate up to 100 hours of additional production capacity. Repeat jobs can be efficiently processed thanks to the storage of job data – previous settings are accurately replicated. You can print up to 18,000 sheets per hour no matter what printing stock you are using.
• **Quality:** The robust and solid construction of the press ensures smooth running. You can achieve optimum, stable print quality regardless of production speed and job sequence. • **Ergonomics:** Sheet guide plates are easy to install and remove. • **Integration:** Intuitive control of all functions via the central Prinect Press Center.
• **Environment:** Washup solution and washup cloth consumption are reduced to a minimum.

Hycolor – A Shining Example of Top Print Quality.
The Inking and Dampening System of the Speedmaster XL 105 Produces Highly Accurate Colors.

The Hycolor inking and dampening system provides the ultimate in print quality.

Innovations in color. Exceptional quality and flexibility thanks to innovative inking unit geometry and highly automated switching features – the Hycolor® inking and dampening system sets the benchmark.

The geometry of the inking units makes it easy to achieve high contrast and absolute dot definition, not to mention smooth solids – and all at speeds of up to 18,000 sheets per hour.

Hycolor – the art of rapid balance. The construction of Hycolor delivers a stable ink/water balance quickly. As a result, an OK sheet can be produced very quickly, which further cuts your makeready times. All ink/dampening unit settings can be input and stored via the Prinect Press Center while the previous job is still in production.

The right temperature provides the optimum results. At the start of production, the CombiStar® inking unit temperature control system quickly brings the ink to the ideal temperature and holds it at that temperature throughout the entire run. The unique ink fountain roller temperature control system boasts its own temperature control circuit, which is controlled separately. This delivers improved ink metering and a higher maximum ink film thickness.

Efficient roller washup device. Washup solution and water are applied to the center of the roller frame. Because the washup solution is sprayed in two directions at once onto the front and rear ink trains, it can be rapidly distributed within the inking unit and dissolve the ink more effectively. This improves cleaning standards and considerably reduces washup times, which is particularly beneficial when changing ink. A second washup solution circuit is available for UV hybrid operation.

Automated inking systems. Heidelberg recommends the highly efficient InkStar® ink supply system for automatic filling of the ink fountains in the Speedmaster XL 105. In contrast to conventional ink metering, the 2 kg (4.41 lbs) ink cartridges this system uses are completely emptied using compressed air. As a result, there is virtually no residual ink left in spent cartridges and ink consumption is significantly reduced.

Technological finesse for top quality and ease of use. The ability to customize the phase settings of the distributors means that you benefit from improved, even ink density from the start of the sheet to its end.

Short-path inking mode can be used for print subjects with low ink consumption. You can also improve ink stability by adjusting the vibrator cycle and benefit from faster and better inking unit responses.

The system is operated automatically from the Prinect Press Center. Installing and removing inking and dampening rollers is a straightforward process. Adjustments that have already been made are retained.

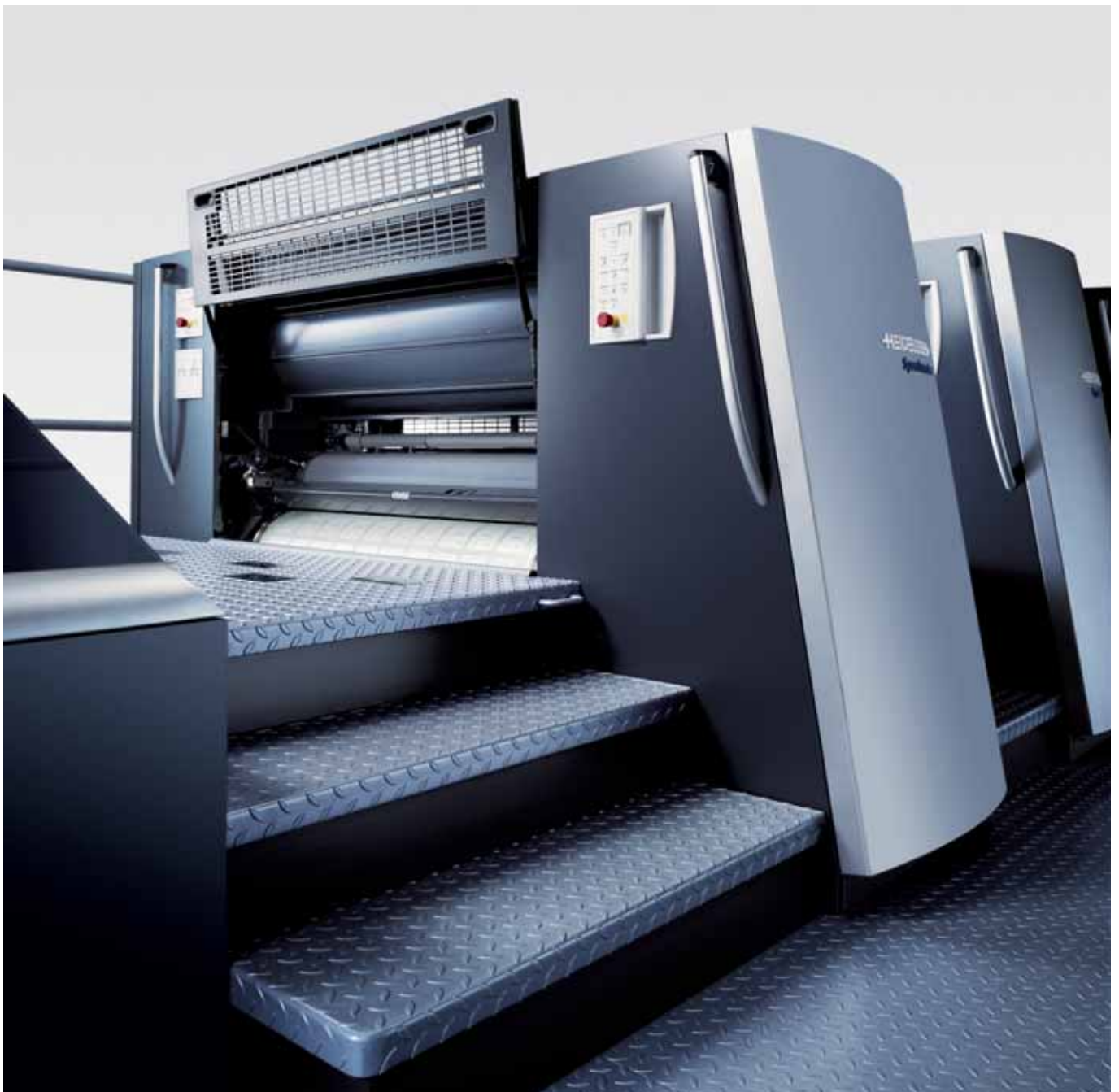**The Hycolor inking and dampening system at a glance:**
- The Prinect Press Center is used to…
  - switch between Standard and Vario mode
  - switch to short-path inking mode for low ink coverage
  - switch the distribution of the inking form roller in different groups
  - activate the dampening system with and without contact to the inking unit
- Automatic separation of the roller groups and deactivation of the distributor stroke if production comes to a halt in the zero oscillation position
- Separate fountain roller and inking unit temperature control system for consistent ink feed and extremely fine metering
- Efficient roller washup device for rapid washup, particularly when changing inks
- Highly efficient InkStar ink supply system

The advantages for your printing process:
• **Makeready times:** The Hycolor remotely adjustable inking and dampening system, easy to clean ink fountains, accurate ink presettings and the storage of ink/dampening unit configuration settings all help cut your makeready times by up to two minutes per job. • **Productivity:** Intelligent and self-learning color characteristic curves, an optimized preinking program and the ability to prepare each new job without having to halt production all help to boost your productivity significantly. Saving two minutes per job on 1,500 jobs delivers up to 50 hours of additional capacity. • **Quality:** You benefit from outstanding and stable quality over the entire run. • **Ergonomics:** Rollers are easy to install and remove. • **Integration:** All inking and dampening unit settings such as short-path inking mode can be selected and stored via the Prinect Press Center. • **Environment:** Hycolor enables you to reduce the amount of alcohol present in the inking unit and thereby improve the environmentally friendly credentials of your production systems.

Dazzling Coatings.
The Coating Unit of the Speedmaster XL 105
Meets Your Customers' Every Need.

The coating unit produces dazzling results.

The ultimate coating results at top speeds. The coating unit of the Speedmaster XL 105 is a chambered blade system with the benefit of cutting-edge flexographic technology. You benefit from an accurately metered coating application system that is easy to operate.

All relevant pressure settings, from the screen roller to the coating blanket cylinder, are entered on the coating unit itself or on the Prinect Press Center. The position of the coating blanket cylinder relative to the impression cylinder can be adjusted at the touch of a button on the Prinect Press Center. Even the smallest of pressure adjustments and tolerance settings in 0.005 mm (0.0002 in) steps can be performed – an extremely useful feature when aiming for the perfect result, particularly with sensitive print subjects.

The lateral, circumferential and diagonal register settings are performed centrally on the Prinect Press Center. As is the case for printing units, all air settings for the coating unit can be called up and stored on the Prinect Press Center.

If the coating unit is not required, it can easily be disconnected. Optimum sheet guidance is assured and sheets will not come into contact with the coating cylinder.

Blanket or plate – the combination clamping system. The coating blanket cylinder automatically finds the right position for clamping the blanket or plate. The system grasps the front and rear edges centrally at the same time. To prevent distortion when applying the blanket or plate to the cylinder, an automated pressing roller supports the operator during the clamping and unclamping process. For difficult materials, the three-part clamping bar at the rear edge of the plates allows manual register correction in all required directions.

For special applications. The chambered blade system with tri-helical engraved anilox rollers delivers a better and more consistent coating result, especially when working with UV coatings. This system processes the coating with excess pressure in the chamber. A sensor and an intelligent pump control system ensure the levels in the collecting trough are constant and prevent air from being sucked into the return flow. This stops the formation of air pockets and foaming. As a result, you achieve an optimum, smooth coating surface – regardless of the production speed.

The coating unit at a glance:
- Chambered blade system for accurately metered coating application
- Single-side and parallel pressure adjustment from coating form cylinder to impression cylinder and from screen roller to coating form cylinder via the Prinect Press Center
- Lateral, circumferential and diagonal registers can be operated remotely from the Prinect Press Center
- The ability to decouple the coating form cylinder enables optimal sheet travel when not using the coating unit
- Combination clamping system with central clamping mechanism enables rapid changing of coating blanket or coating plate
- Multi Loader System, the motorized screen roller storage system for up to four rollers

The advantages for your printing process:
• **Makeready times:** Depending on the job structure, the makeready time in the coating unit can be reduced by up to ten minutes per job thanks to rapid screen roller changing with the Multi Loader System, the quick-action clamping system for plates and blankets and the fact that all relevant settings can be adjusted remotely. • **Productivity:** Integrated into the Speedmaster XL 105, the coating unit can reliably process 18,000 sheets per hour. • **Quality:** Optimum coating quality is ensured by a combination of extremely accurate settings and a standard chambered blade system. • **Integration:** Almost all settings can be adjusted via the Prinect Press Center. • **Environment:** Automated waste-water cleaning procedures reduce the consumption of fresh water.

Consistent Quality from Start to Finish.
The Preset Plus Delivery Ensures Precisely Aligned Piles, Creating the Ideal Conditions for Finishing.

The delivery safely stacks top-quality print results in the pile.

Tidy and neatly aligned – the perfect pile. The Preset Plus Delivery will help you achieve highly accurate pile formation quickly and cost-effectively. Venturi nozzle technology in the sheet guide plates in the delivery area and aerodynamically designed gripper bars ensure optimum paper travel.

The presettable, dynamic sheet brake decelerates sheets in a controlled manner. To do this, the brake modules are accelerated to just under production speed each time a sheet travels through them. As soon as the brake has a secure hold on the sheet, the speed is reduced to the preset delivery speed.

The presettable delivery air system uses a stream of air that can be precisely calibrated to ensure that the pile is formed with the neatly aligned edges essential for optimum finishing.

Fast and straightforward thanks to automatic settings. When you input the sheet format, the delivery format and air settings are automatically adjusted. This function significantly reduces your makeready times.

Additional adjustments are made centrally on the Prinect Press Center or by using the touchscreen and jogwheel on the easy-to-use delivery control panel. This streamlines processes and provides direct access during production, thereby saving you valuable time.

Minimum powder consumption and improved efficiency. The PowderStar® AP 500 from Heidelberg is a unique powder spray device. Its 24 powder nozzles distribute powder evenly over the sheet. Because it operates at a higher application pressure than conventional systems, less powder is deflected from the sheet. This results in improved powder efficiency and reduced powder quantities. Furthermore, considerably less cleaning processes are required.

The CleanStar® process air cleaning system extracts powder through four suction points integrated into the delivery. An automatic self-cleaning system in the delivery air system and additional brushes for cleaning the gripper bars and chains make CleanStar even more efficient.

The Preset Plus Delivery at a glance:
- Dynamic sheet brake and delivery air system for optimum, mark-free quality all the way to the pile
- Transmitting all preset values from the Prinect Press Center to the delivery
- Automatic positioning of all sheet guidance elements
- Fine adjustment easily performed using the jogwheel on the delivery control panel
- Unique PowderStar AP 500 powder spray device for efficient powder application
- CleanStar process air cleaning system for minimizing the accumulation of dust and unpleasant odors in the press

The advantages for your printing process:
• **Makeready times:** Benefit from extremely short makeready times. When changing format and printing stock, automatic adjustment of the delivery via preset functions delivers time savings of up to five minutes compared to less automated presses. • **Productivity:** All components in the delivery are designed to ensure stable production at high speed and for a broad range of printing stock. • **Quality:** You achieve scratch-free and mark-free sheet travel throughout the press, right up to the delivery. A pile with neatly aligned edges creates the ideal conditions for optimum finishing. • **Integration:** You can easily and quickly manage all delivery presets on the central Prinect Press Center. • **Environment:** Efficient powder application reduces consumption. Cleaning process air helps to ensure a pleasant working environment.

Prinected.
Prinect Integration Changes Your Processes – and Delivers Lasting Quality and Cost Efficiency Gains.

Get Prinected. Prinect is the printshop workflow and your path to integrated print production. Prinect brings together production and management processes in a single workflow. Get Prinected – for optimized processes and greater cost efficiency in your printshop.

Active management of the printing process based on stored data. The aim of every printshop is to produce print products rapidly, cost-effectively and to the highest quality standards. Cost-effective print production begins when a job is accepted and costed and continues through the prepress and press stages to finishing and invoicing. The only way you can make decisions based on sound data and actively manage processes is if you have up-to-the-minute information on how each job is progressing. Print jobs can then be implemented within the tightest of timeframes and you can keep a handle on quality and costs even when unscheduled changes need to be made.

End-to-end transparency accelerates decision making. Prinect, the printshop workflow, is based on the universal data format JDF. This renders each individual process transparent, thereby enabling end-to-end management of the printshop. Everybody involved in the process uses a single stock of data, the central JDF document, which incorporates all relevant information in a digital job folder. Prinect is made up of various software and hardware modules that can be combined according to your requirements. The level of integration in your printshop is determined solely by your needs, but can be altered or expanded at any time. Other makes of system can also be integrated.

Ultimate automation and direct control. Prinect can do even more though. It automates processes that have previously been executed manually, making them far faster and less prone to errors. This frees you up from routine tasks while enabling you to stay in full control at all times, so that you can intervene and make adjustments if necessary. Heidelberg is therefore the only manufacturer to offer a printshop workflow that integrates and manages the entire print production process – Prinect.

Get Prinected. The Prinect Press Center control station integrates the press into the Prinect workflow.

Prinected. Prepress ink presettings reduce makeready times and waste. Short makeready times are essential to cost-efficient production in the modern printshop. This is also where Prinect integration can have a major impact. Prinect links the pressroom to prepress operations, thereby providing direct access to ink presetting data from the prepress stage at the press itself, where it can be used to automatically adjust ink zones.

There is no faster way to ink up – even the first pull brings you close to the OK sheet. What's more, the Prinect Press Center also generates a job preview, which enables you to easily identify and select the right job. A further benefit of the Prinect Press Center is that it allows you to load and prepare the next job in line while production of the previous job is still underway. Your press productivity will be dramatically increased.

Prinected. Consistent color quality and proof and print results that match. In order to satisfy both quality requirements and commercial concerns equally, it is important to standardize the printing process. This ensures that the desired quality can be achieved at all times. That is why Prinect includes calibration, profiling and quality control tools that make sure your proof and your print result match, that the Speedmaster XL 105 inks up fast, and that the press delivers consistent production quality. A unique closed loop between prepress and press makes sure the current job always keeps on track. For example, if a new batch of ink causes the dot gain to change, the color measuring system will register this and transmit it direct to prepress so that characteristic curves and profiles can be adjusted accordingly. The next set of printing plates are immediately adapted to the new production conditions and all color-related production parameters are also available for repeat jobs and for profile adjustment in the creation of
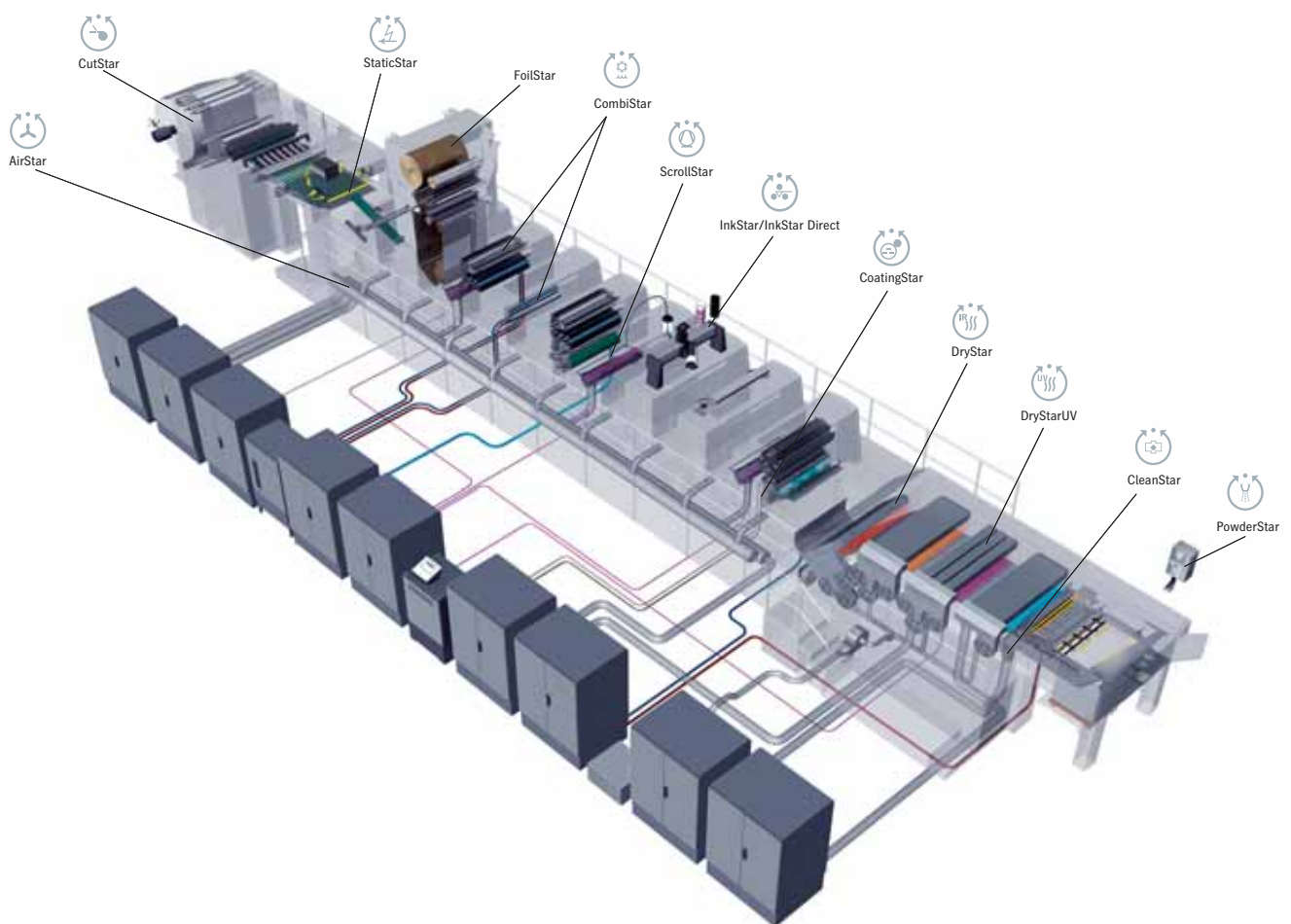
proofs. Thanks to Prinect, proof, plate and printing are integrated for the first time into an end-to-end color control process.

Prinected. Cost transparency makes management and costing easier. The Prinect Press Center of the Speedmaster XL 105 integrates the press directly into Prinect business management processes. Current production data is recorded centrally and made available in real time for costing, planning and other commercial processes. This means you can identify the exact stage that a job has reached at any one time, which is crucial when you need to quickly ascertain the workload involved in making changes. In other words, you no longer need to spend vast amounts of time looking into a job and making a whole series of inquiries. Prinect takes care of everything and can analyze and present each job quickly and concisely.

Advantages for your printing process:
• **Makeready times:** Presetting your press using prepress data helps cut your makeready time dramatically.
• **Productivity:** Shorter makeready times and minimum waste boost your productivity. • **Quality:** Optimized and standardized processes enable you to achieve maximum and stable quality standards. • **Integration:** The ultimate data management solution delivers benefits throughout the entire workflow.

Working in Perfect Harmony.
Make the Most of the Speedmaster XL 105 by Using the Star System from Heidelberg.

CutStar

StaticStar

FoilStar

CombiStar

AirStar

ScrollStar

InkStar/InkStar Direct

CoatingStar

DryStar

DryStarUV

CleanStar

PowderStar

Be prepared for every eventuality with peripherals from the Star System.

Star system. Short setup times, maximum productivity and high print quality are essential qualities that help a printshop operate successfully. To achieve this success, all the components that go to make up a press must be perfectly coordinated. That is why we offer both presses and peripherals from a single source. All units are developed directly by Heidelberg or in close cooperation with well-known suppliers. Installation and servicing are carried out by the renowned Heidelberg service network. All this helps you make the most of your Speedmaster XL 105.

The CutStar® sheeter ensures that reel stock is processed efficiently by the Speedmaster XL 105. The cheaper cost of reel stock and the ability to vary sheet cutoff lengths can help you reduce your printing stock costs considerably. The versatile design of CutStar allows you to switch between sheet and reel modes in a matter of minutes.

StaticStar™ Compact and StaticStar Advanced provide a high-quality anti-static system for feeder and delivery that provides excellent sheet separation in the feeder pile, smooth sheet travel and neat pile formation. Heidelberg also offers foil printers a foil kit specially designed for the Speedmaster XL 105 that makes it far easier to process printing stock that can easily become electrostatically charged or is very thin.

Where special finishes are needed for labels, packaging and demanding commercial jobs, the FoilStar cold foil module opens up a whole new world of possibilities, delivering dazzling metallic effects that add value to your print products. Two printing units are involved in applying cold foil with FoilStar. The first of these applies fast-drying adhesive via an offset printing plate. The second, the cold foil unit, is where pressure is used in the nip between the blanket and impression cylinders to apply foil to the areas of the sheet coated in adhesive. Cold foil finishing offers you all the benefits of offset printing with the same high productivity levels.

CoatingStar® and CoatingStar Compact are two coating supply units that boast incredibly low-wear and low-maintenance annular piston pump technology. The pulse-free coating feed, integrated coating heating system and automatic washup programs of CoatingStar ensure the ultimate in coating quality standards and rapid coating changes.

DryStar® Ink and DryStar Combination from Heidelberg represent two ideal dryer systems for inks and coatings. Modules incorporating IR lamps, hot air and circulating air make sure that all applications, from protective to high-gloss coatings, are properly dried. All the dryers are based on a cassette design and can be inserted and retracted from the operator's side. Their optimum integration into the delivery means they are positioned as close as possible to the sheet, which improves performance considerably. Water-cooled sheet guide plates prevent overheating. The systems are easy to use and, thanks to CANopen, can be operated from the Prinect Press Center or the delivery control panel. An automatic dryer mechanism implements all settings for standard jobs. DryStar Advanced also enables you to store all dryer settings, which reduces makeready times for repeat jobs.

The versatility and productivity of the Speedmaster XL 105 can also be fully utilized for UV printing. Each unit is fitted with a dryer preparation system that enables DryStar UV interdeck dryers to be moved between units in a matter of minutes, without the need for tools. A DryStar UV dryer in the extended delivery ensures that UV coatings cure properly. Perfect heat management, optimized reflectors, infinitely variable power levels and specially designed lamps for use in opaque white mode deliver maximum productivity across all applications.

InstantStart software cuts your waiting times before and after blanket washing.

Technical Data Speedmaster XL 105

Printing stock

Min. sheet size	340 mm × 480 mm (13.39 in × 18.90 in)
Max. sheet size	750 mm × 1,050 mm (29.53 in × 41.34 in)
Max. print format	740 mm × 1,050 mm (29.13 in × 41.34 in)
Thickness	0.03 mm – 1.0 mm (0.0012 in × 0.039 in)
Gripper margin	11 mm (10 mm – 12 mm) (0.43 in [0.39 in × 0.47 in])

Print output

Maximum	18,000 sheets/hour

Plate cylinder

Undercut	0.10 mm (0.0039 in)
Distance from leading edge of plate to start of printing	53 mm (2.09 in)

Printing Plates

Length × width	811 mm × 1,055 mm (31.93 in × 41.54 in)
Thickness	0.24 mm – 0.30 mm (0.0094 in × 0.012 in)

Blanket cylinder

Length x width (metal-backed blanket)	885 mm × 1,077 mm (34.84 in × 42.40 in)
Thickness (blanket)	1.95 mm (0.077 in)
Length × width (packing sheet)	765 mm × 1,054 mm (30.12 in × 41.50 in)
Undercut	2.3 mm (0.091 in)

Coating blanket cylinder

Length x width Coating blanket (metal-backed)	828 mm × 1,072 mm (32.60 in × 42.20 in)
Length × width Coating plate	819 mm × 1,060 mm (32.24 in × 41.73 in)
Undercut	3.2 mm (0.13 in)
Distance from leading edge of plate to start of coating	43 mm (1.69 in)
Max. coating format	740 mm × 1,050 mm (29.13 in × 41.34 in)

Pile height
(incl. pile board and pile support plates)

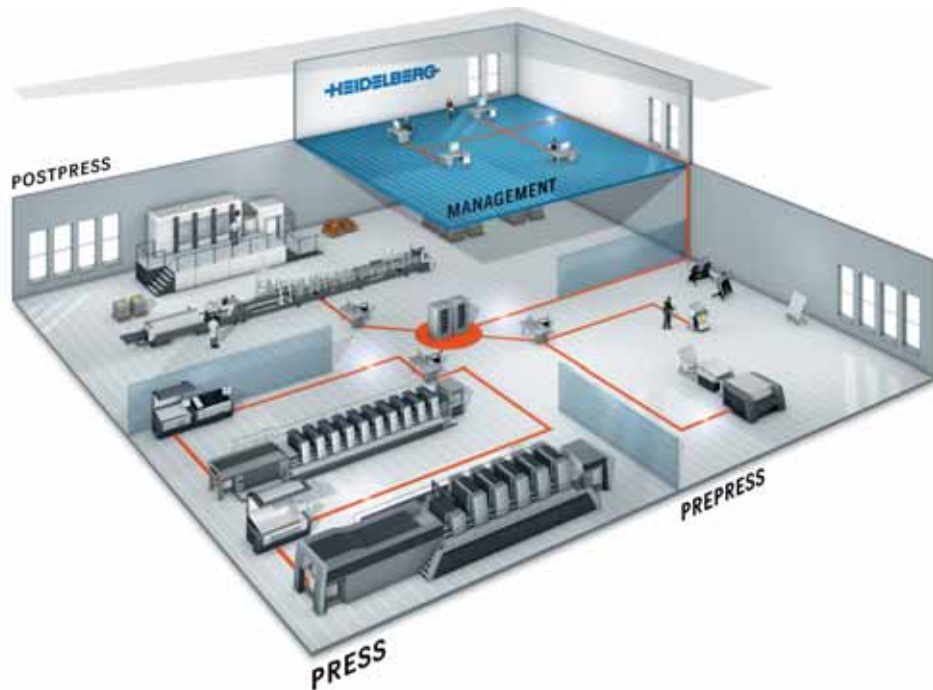|	
Preset Plus Feeder	1,320 mm (51.97 in)
Preset Plus Delivery	1,295 mm (50.98 in)

Sample configuration

Dimensions of the
Speedmaster XL 105-6+L with
Preset Plus Feeder and Delivery
and two delivery extension modules

Number of printing units	6
Length	16.50 m (649.51 in)
Width	3.93 m (154.70 in)
Height	2.08 m (82.05 in)

Technical data can vary according to job, ink, printing stock and, possibly, other factors.

A whole range of Heidelberg products is ideally suited for use alongside your Speedmaster XL 105.

The table below lists all the components that make sure you achieve peak performance:

Solution components

	Commercial printing	Packaging printing
Management	Prinect Prinance Prinect Integration Manager	Prinect Integration Manager
Prepress	Prinect Prepress Manager Prinect Signa Station Prinect MetaDimension Suprasetter 105	Prinect Prepress Manager Prinect Signa Station Prinect MetaDimension Suprasetter 105
Press	Prinect Pressroom Manager Prinect Press Center Prinect Image Control Prinect Inpress Control	Prinect Pressroom Manager Prinect Press Center Prinect Image Control
Postpress	Prinect Postpress Manager Polar 137 Stahlfolder TH 82 Stitchmaster ST 450 Eurobind 4000	Dymatrix 106 Pro Diana X 115
Systemservice	Maintenance, Parts Coverage, Repair Coverage, Remote Services, Print Color Management, Original Heidelberg Service Parts, Software Maintenance, Extended Service Availability, Expert Support	
Saphira	Proofing Supplies, Plates, Inks, Chemicals, Blankets and other Supplies	

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