

RMGT 9

A1-Size Offset Presses

920 model

9



Providing optimum solutions for printers seeking cost savings

“Assist your potential with technological expertise and constant innovation.”

RMGT aims to maximize your potential through labor-saving press automation technologies.

This ongoing commitment is embodied by RMGT’s 920 model A1-size offset presses,
which meet an impressive range of needs from 2-color straight printing to 10-color convertible perfecting.

These versatile presses offer the latest automation and labor-saving systems,
including a large-screen press information display for confirming printing status at a glance,
together with the same maintenance functions, sheet feed air presets,
and smart make-ready functions as our flagship RMGT 10 series.

Faster job changeover greatly boosts printshop productivity.


And the new “Smart Assist Printing” automatic printing function significantly reduces operator workload.

RMGT 920 model presses enable a greatly expanded range of work, creating new potential for your printing business.

We offer the solid cost performance printing companies need.



920ST-4 (A1-Size Straight 4-Color Press)



**The RMGT 920's exciting features will
revolutionize your business**

Fast Job Changeover

Exceptional Printing Quality

A Cleaner Printing Environment

Operator Assist Functions

RMGT Smart Net



920PF-8 (A1-Size 8-Color Convertible Perfector)

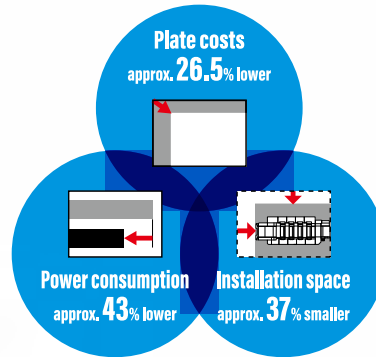
8-up printing of A4 size and letter size

RMGT 920 presses are ideal for A1-size printing. Designed for a maximum sheet width of 920 mm (printed width = 900 mm), they can handle A1-size posters as well as 8-up printing of both A4 size and letter size.

Lower material costs, lower power consumption and less installation space than a B1-size press

Printing plate costs and power consumption are markedly lower than for a B1-size press, and the compact space-saving design allows efficient space utilization.

[Advantages of the 920 compared to a B1-size press*]



* In-house comparison: actual results will vary according to operating conditions.

Perfect with ou



One pass full-color perfecting achieves higher productivity

An automatic perfecting device (option) markedly increases productivity for one-pass perfecting. Plus, installing an LED-UV curing unit at the perfecting device and at the delivery section enables instant drying of both printed sides, eliminating any delay before proceeding to postpress processes.



Double/double/single-diameter cylinder perfecting mechanism used on 8- to 10-color convertible perfectors



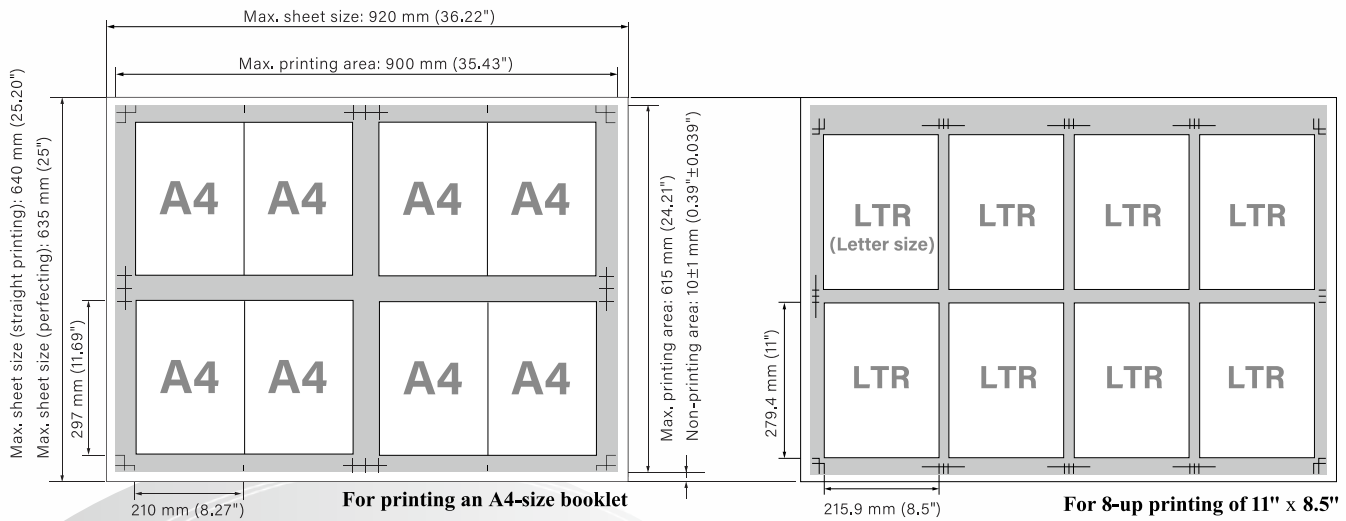
LED-UV curing unit over the convertible perfecting device

Note: Paper tail edge vacuum ON/OFF switching may be a manual task, depending on sheet width.

Retractable coating unit enables make-ready work during printing

A movable varnish coating unit enables the coating cylinder and anilox roller to be raised upward when not in use to prevent scratching of the printed sheets. A safety guard between the main press unit and coating cylinder enables make-ready work for subsequent jobs—such as cleaning the coating cylinder and changing the blanket—to be performed even while printing.





for A-series jobs,
 tstanding cost-performance



920PF-8 (A1-Size 8-Color Convertible Perfector)

Fast Job Changeover

- Fast, precise plate changing
- Smart Make-Ready function
- Program Inking supplies the right amount of ink as soon as printing starts
- Feeder air presets for easier paper change (option)

Exceptional Printing Quality

- Double-diameter printing mechanism ensures stable sheet transfer
- Gripper open/close mechanism ensures reliable sheet transfer
- Stable sheet feeding from thin sheets to board
- Vacuum feeder board enables smooth sheet transfer
- Advanced dampening system for an optimized balance of water and ink
- Press with coating unit meets the need for diversified value-added printing

Operator Assist Functions

- Maintenance mode
- Centralized management and control of printing and data from PCS-G
- Press information display for checking press operation status at the delivery section (option)
- Automated printing density control and consistent printing quality
- Smart Assist Printing (option)

A Cleaner Printing Environment

- LED-UV curing system (option)

Employing the functions of the flagship RMGT 10

The RMGT 9 presses achieve higher performance by adopting many of the functions found in the flagship RMGT 10 presses, such as sheet transfer technology and the easy roller nip pressure checking function that reduces maintenance work.



Fast Job Changeover

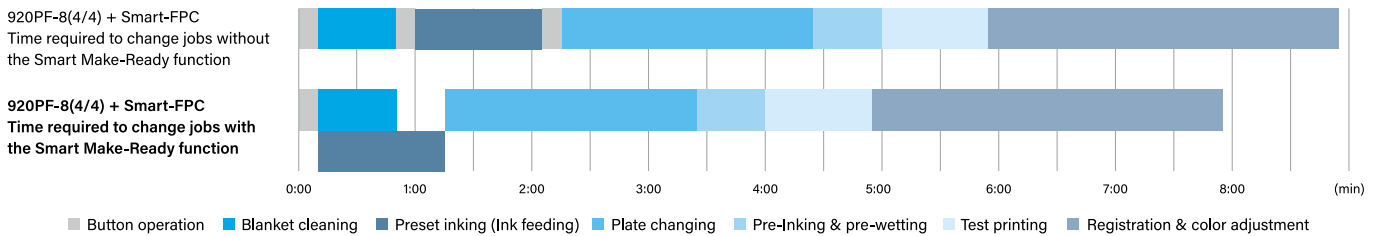
Ultra-short make-ready time for greater productivity

The key to higher productivity for multi-variety small-lot printing work is shorter make-ready time. Features such as Program Inking for faster color adjustment, an automatic plate changing system, a Smart Make-Ready function, automatic cleaning devices, and feeder air presets* automate much of the make-ready work for a marked boost in efficiency.

* Option

Smart Make-Ready function

A Smart Make-Ready function that automatically performs blanket cleaning, plate changing, preset inking and test printing greatly enhances efficiency. Job changeover is shortened even further by a newly-added feature that allows blanket cleaning and preset inking (ink feeding) to be performed simultaneously. Fast job changeover further boosts productivity for diverse, small-lot printing.



Note: The times shown were measured in-house by RMGT engineers. Actual results will vary according to the printing conditions, printing speed, and operator proficiency.

Automatic plate changing

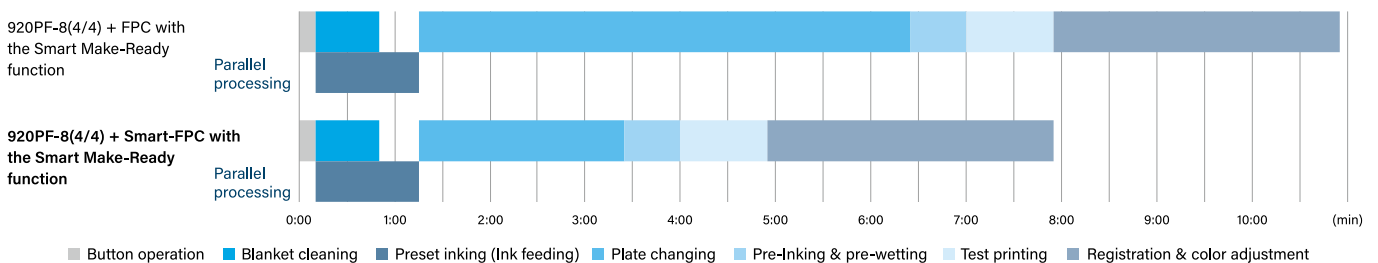
920 presses can be equipped with the Smart-FPC fully automatic simultaneous plate changing system, FPC fully automatic plate changing system, or SPC semiautomatic plate changing system*. When changing plates with the Smart-FPC or FPC, both plate loading and ejection can be automatically performed at the touch of a button on the touchscreen monitor of the PCS-G printing control system. This enables the operator to perform other tasks during plate changing and eliminates the make-ready time.

* SPC is standardly equipped; Smart-FPC and FPC are options



Smart-FPC fully automatic simultaneous plate changing system

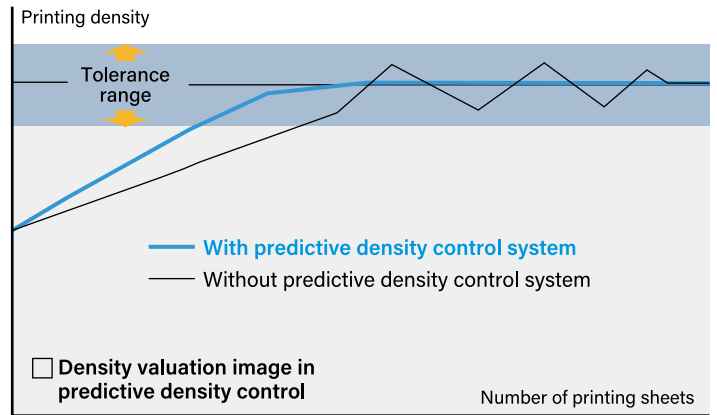
[Comparison of Smart-FPC and FPC make-ready times]



Note: The times shown were measured in-house by RMGT engineers. Actual results will vary according to the printing conditions, printing speed, and operator proficiency.

Predictive density control system* NEW

A newly developed system for quickly achieving and maintaining the target density with minimum wasted sheets. Ink density is automatically adjusted and controlled by measuring the color bar density on printed sheets and predicting the ink density. This reduces sheet waste during job changeover and maintains stable printing density.

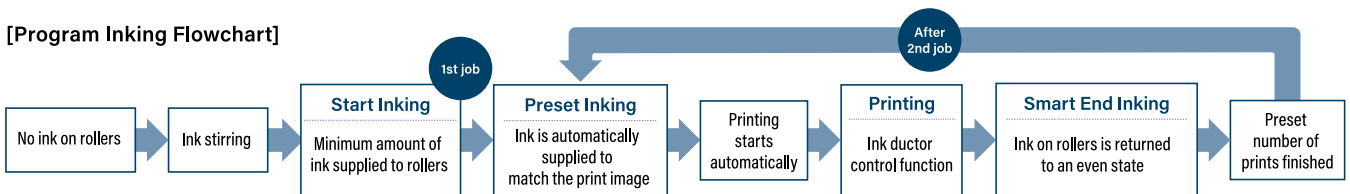


* Using a PDS-E SpectroDrive/SpectroJet printing density control system and a PQS-D printing quality control system

Program Inking

Ink is automatically supplied to match the print image. After a set number of sheets has been printed, the ink on the rollers is automatically returned to an even state to move smoothly on to the next job.

[Program Inking Flowchart]



Base ink volume control function

Even with job changeover to a completely different print image, the amount of ink on the ink rollers is quickly increased or decreased to begin printing with less waiting time.

Base ink volume-down function: The ink roller cleanup attachment contacts the ink oscillating roller and reduces ink volume.

Base ink volume-up function: The ink ductor roller contacts the ink rollers to quickly increase the volume of ink on the rollers.

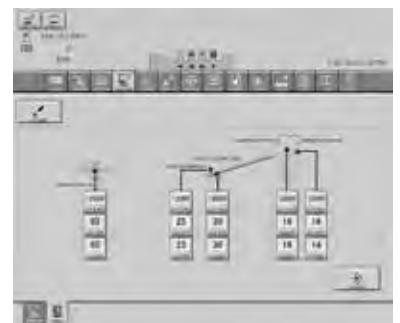


Base ink volume-down function screen

Feeder air presetting*

The air volume for the feeder and registration sections can be preset together from the operation stand according to the substrate type and thickness, shortening make-ready time when changing sheets. Fine adjustment is possible if more precise air adjustment is required, such as for printing on thin stock. Preset values can be updated and stored, enhancing preset precision for repeat work.

* Option



Feeder air presetting screen

Exceptional Printing Quality

Supports high quality printing of multiple jobs

Superior sheet delivery performance is assured by the same advanced air management technology found on B1-size printing presses. High-precision mechanisms for stable print quality and color reproducibility provide the ruggedness and durability to maintain precision printing over many years. Built without compromise, dependably solid performance allows a wide variety of work to be handled on the pressroom.

Double-diameter cylinders ensure stable sheet transfer

The printing unit consists of a double-diameter impression cylinder and transfer cylinder. The large radius of curvature ensures stable sheet transfer by suppressing flapping even when printing on heavy stock and film.

Gripper open/close mechanism ensures reliable sheet transfer

Each gripper shaft features a torsion bar-type gripper open/close mechanism. Reliable gripper-to-gripper sheet transfer at any operation speed ensures stable registration accuracy.

Stable sheet feeding from thin sheets to cardboard

The same high-speed, high-performance separator equipped on RMGT 10 presses is also equipped on RMGT 9 presses. From thin 0.04 mm sheets to thick 0.6 mm stock*, sophisticated air management technology ensures each sheet is fed precisely even during high-speed press runs. This stock handling capability makes possible a wide range of applications, from poster to package printing.

* 0.04 - 0.4 mm for the 920PF

Vacuum feeder board enables smooth sheet transfer

The vacuum feeder board ensures smooth, stable sheet feed from the feeder board to the front lay. An integrated brush and runner wheel mechanism shortens the time needed to change sheet sizes. A pneumatic pull side guide* minimizes contact scratches when feeding delicate substrates.

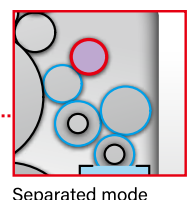
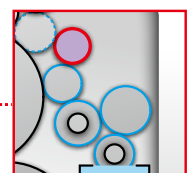
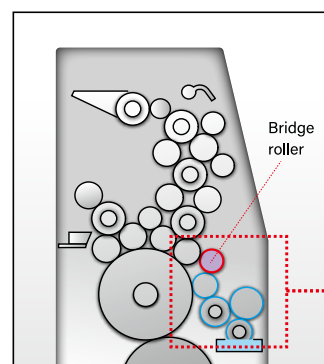
* Option

Advanced dampening system for an optimized balance of water and ink

The R-matic continuous dampening system assures a uniform dampening supply on the plate surface to reproduce sharp dots, glossy solids and finely detailed text. This system also allows non-alcohol printing. Switching between integrated mode and separated mode from the touch-panel display is easy, for precisely matching the image and characteristics.

The R-matic-D* Continuous Dampening System with Hickey Removing Function and R-matic-D Remote* Continuous Dampening System with Remote ON/OFF Hickey Removing Function substantially reduce hickies on plates by adopting a drive mechanism for the water form roller that creates a rotational speed difference between the water form roller and plate cylinder.

* Option



A Cleaner Printing Environment

Environment-friendly LED-UV curing unit* contributes to higher productivity

RMGT is the first press manufacturer worldwide to put LED-UV curing systems into commercial production for sheet-fed offset printing. RMGT continues to lead the industry in this area by further improving and developing the curing system, which features outstanding environmental performance.

* Option

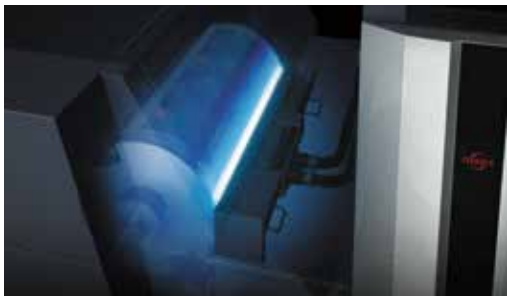
Features of LED-UV curing system

Low power consumption

Power consumption of the LED-UV curing system is only 44%* of a conventional UV lamp system.

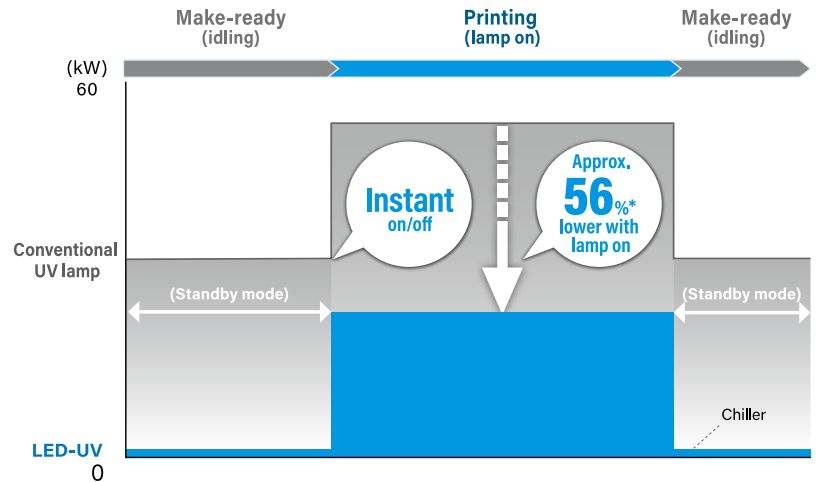
In addition, the instant on-and-off of LED-UV lighting eliminates the need for substantial standby power.

* For the 920 model (the percentage may vary depending on various conditions).



Power consumption vs. conventional UV lamp*

Greatly reduced during both printing (lit) and make-ready (idling).

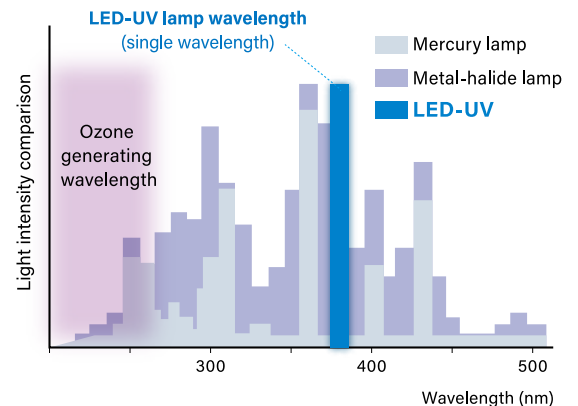


* For the 920 model (the percentage may vary depending on various conditions).

Ozone-less and low heat generation

The LED-UV system operates at a UV wavelength that generates no ozone, so there is none of the ozone odor peculiar to UV printing. The LED-UV curing unit also generates much less heat, eliminating the need to install ducts for ozone and heat exhaust while greatly reducing the heat effect on the substrate. Also, a clean work environment can be easily maintained since no spray powder is used.

Wavelength comparison of LED-UV and conventional UV lamps

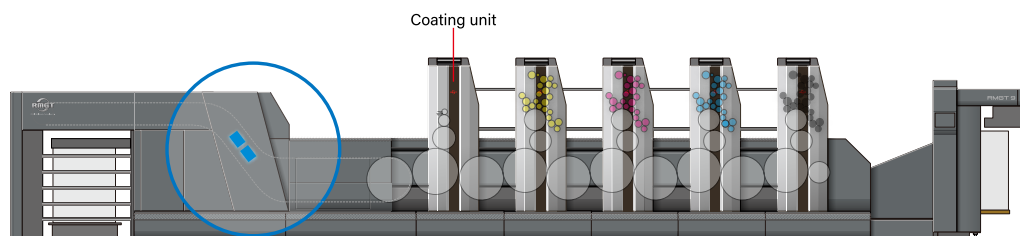


Varnish and special substrates for high-value-added printing*

The growing popularity of the LED-UV curing system has led to a wider selection of inks, varnishes and substrates. An array of high-value-added printing services can be offered by combining special colors such as gold and silver, various varnish coating surface treatments, and printing on special substrates.

* Drying performance may vary depending on printing conditions such as the paper, ink, varnish, drying unit, printing speed, etc.

Instant drying for offset printing + UV coating



Operator Assist Functions

Advanced assist functions reduce operator labor

RMGT's advanced technology provides powerful operator assistance — from make-ready tasks to printing, cleaning and maintenance — to meet the growing need for automation and labor-saving.

Press Information Display*

The real-time status of sheet transport is captured by network cameras for viewing on the live-view monitor. The Press Information Display features functions for displaying image data, job progress, printing density measurement results, the operating status of safety devices, and other information. The Press Information Display is also available with Press Information Edge, a platform for connecting to the printing company's ERP system.

(The basic configuration is 3 network cameras, with up to 10 cameras installable.)

* Option



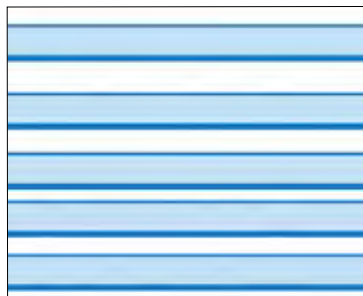
Live-view monitors



Density measurement monitor

Maintenance mode

The one-touch nip pressure adjustment position cue function and automatic roller nip pressure checking function reduce the labor required for maintenance work. Nip checking is remarkably easier thanks to the nip-checking mode that prints the actual nip width in a single sheet pass.



Example: Nip-printed sheet



Maintenance mode screen

Automatic cleaning devices

The automatic blanket cleaning device and automatic ink roller cleaning device* greatly reduce the time and labor needed for cleaning and changing colors during job changeover. Custom setting and program registration can be performed to activate each cleaning device according to the level of cleaning required.

* Option

PDS-E SpectroDrive/SpectroJet* — Printing Density Control Systems

The color bar on printed sheets is measured and the differences in solid and halftone densities from the standard values are calculated. Using a predictive density control system, the ink correction value is calculated from those differences. The opening of the ink fountain keys is then automatically controlled to quickly match the printing densities to the target values. By numerically managing ink density, a task that previously relied on operator experience and intuition, color adjustment can be quickly and accurately performed, reducing sheet waste and maintaining consistent printing quality.

* Option



PDS-E SpectroDrive

PQS-D (I+C+R) Printing Quality Control System*

A CCD camera installed on the press captures images of the printed sheets to perform inline quality inspection, printing density tracking, and automatic register control without pulling out sheets.

• Quality inspection function (I)

Hickeys and other marks are automatically detected, and the location and type of each defect is displayed. The defective sheets can also be sorted out using a tape inserter.

• Printing density tracking function (C)

During printing, the CCD camera records images of the color bars on the printed sheets for comparison with the target density. The ink keys are then automatically controlled to eliminate any difference in density.

• Automatic register adjustment function (R)

The CCD camera captures images of the special registration marks and the registration is automatically adjusted.

* Optional configuration combining the PQS-D (C) and PQS-D (R) with the PQS-D (I).



CCD camera

Smart Assist Printing*1*2 NEW

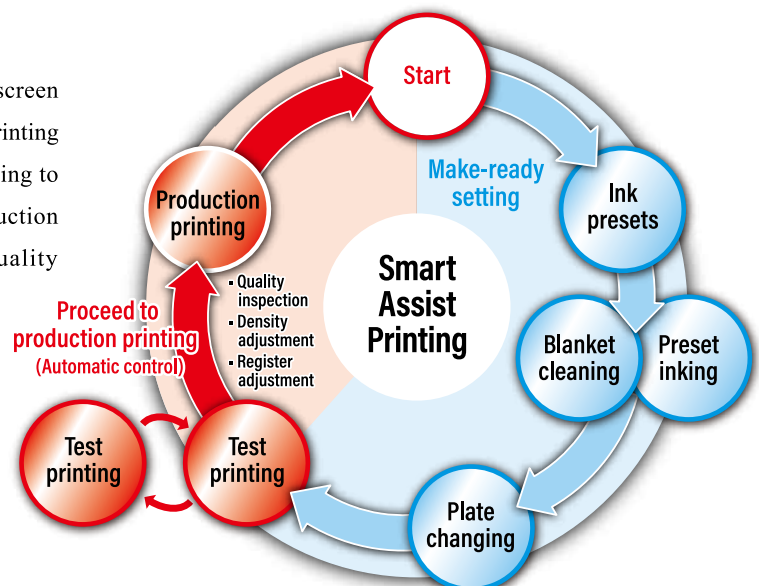
Enabling nonstop printing of multiple jobs at the touch of an onscreen button, Smart Assist Printing automatically performs a series of printing processes from ink presetting, blanket cleaning, and plate changing to test printing, register adjustment, density adjustment, and production printing. In conjunction with the PQS-D system, printing quality inspection, density adjustment, and registration adjustment are performed automatically without sampling printed sheets. The result is highly efficient job changeover for short-run printing.

For jobs that demand quality inspection by the operator, production printing can begin with visual verification after test printing.

*1 Option

*2 Smart Assist Printing requires the following optional devices.

- Automatic blanket cleaning device • Impression pressure presetting device • PQS-D (I+C+R)
- FPC fully automatic plate changing system or Smart-FPC fully automatic simultaneous plate changing system • PDS-E SpectroDrive/SpectroJet
- Press Information Display or Press Information Edge • PPC server III or Ink Volume Setter • Tape inserter



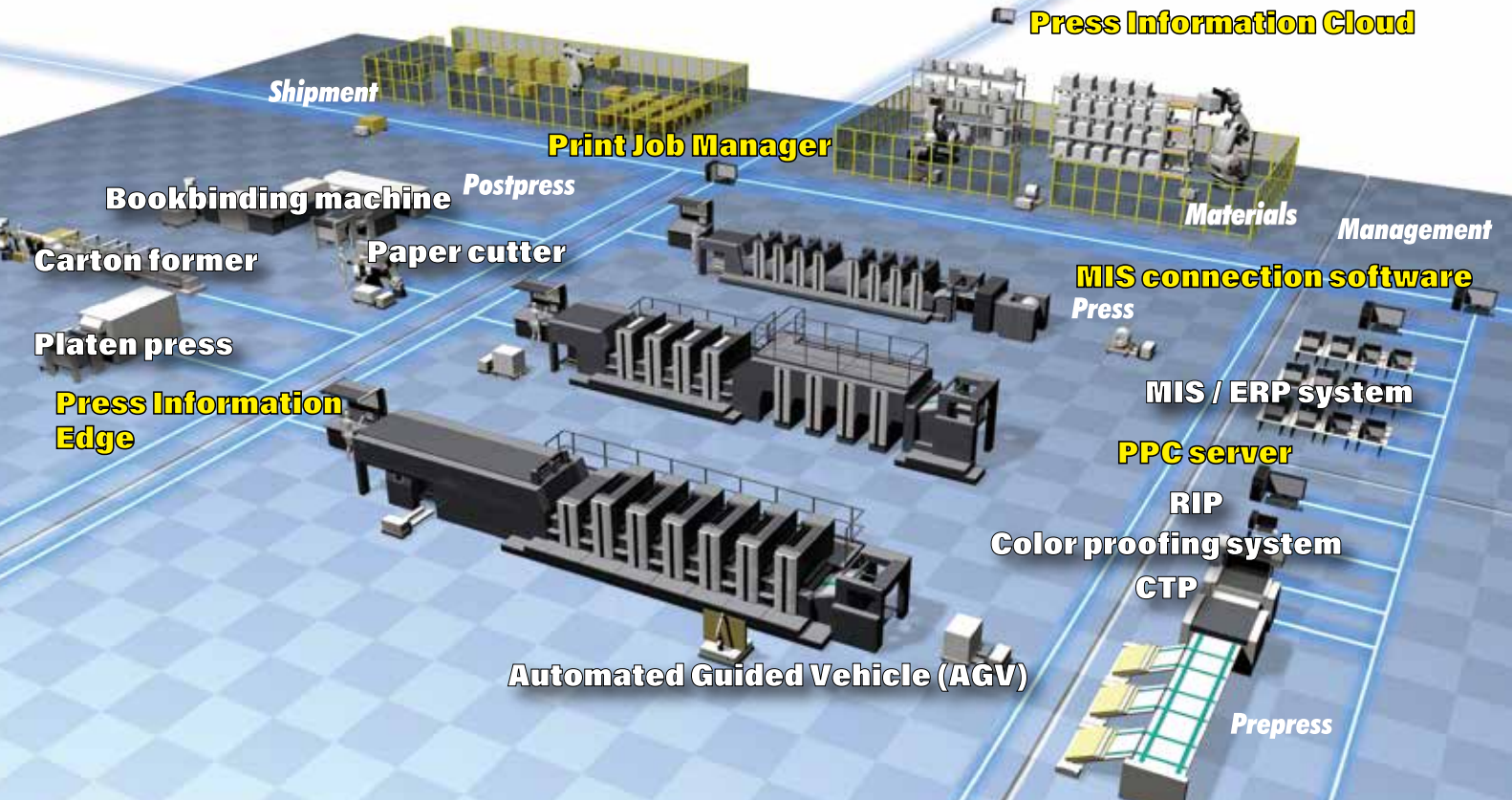
RMGT Smart Net

Workflow optimization through network connection

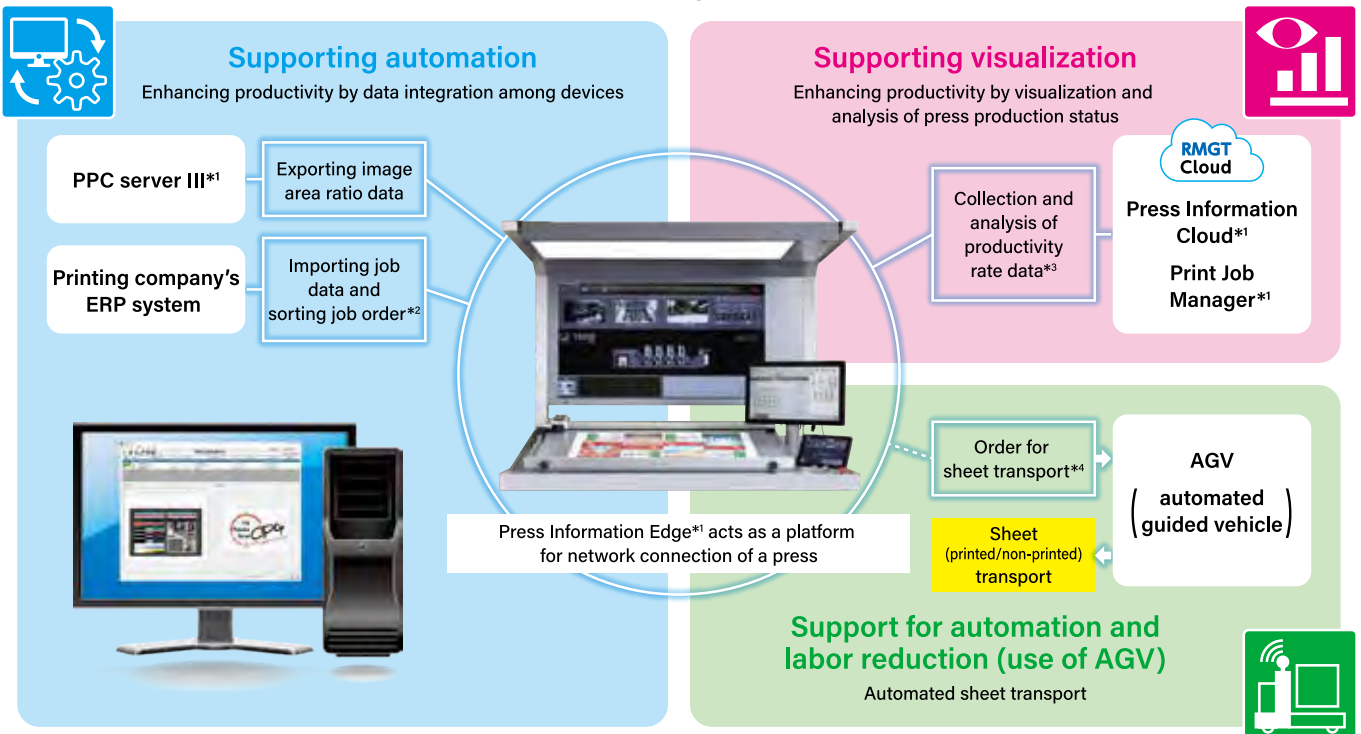
A workflow in which all equipment, systems, and processes required for producing printed materials are connected via a network can be set up, providing powerful support for a “smart” printshop.

Visualization of printing processes and support for automation and

AGV operation significantly reduce the burden on staff and improve print shop efficiency.

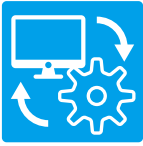


RMGT Smart Factory Solution Concept



*1 Option *2 Press Information Edge is needed for importing job data and job order sorting.

*3 Press Information Edge is needed to connect with Press Information Cloud. *4 Wireless connection. Requires Press Information Edge.



Supporting automation

Press Information Edge

Job data including paper size and ink is received from the printing company's ERP system, then printing job data automatically linking the image area ratio data is generated. The job data is then sorted by sheet size, sheet thickness, and other parameters and integrated with the Smart Assist Printing functions for optimized automatic operation. The resulting press operation data is also automatically uploaded to the Press Information Cloud. Press Information Cloud is a platform that connects the printing company's ERP system, presses, peripheral equipment and Press Information Cloud.

[Optimal job order sorting] **NEW**

Printing jobs are automatically sorted into the optimum order according to sheet size, thickness, and other printing conditions, reducing the amount of time required for tasks such as changing the paper and colors during job changeover.

Job Number	Paper	Sheet Size	Sheet Thickness	Sheet Area Ratio
000120-1 Page (01) catalog	OK Topcoat (Standard)	636.9 × 919.0 (2,501)	0.252 (94/32)	(1.12 mm ²) (3.44%)
000180-1 Page (02) News	OK Topcoat (Standard)	636.9 × 919.0 (2,501)	0.252 (94/32)	(1.12 mm ²) (3.44%)
1410 Page (01) Notebook	Green Paper (Standard)	636.9 × 919.0 (2,501)	0.252 (94/32)	(1.12 mm ²) (3.44%)
000180-1 Page (01) catalog	Green Paper (Standard)	636.9 × 919.0 (2,501)	0.252 (94/32)	(1.12 mm ²) (3.44%)
1250 Page (01) Poster E	Green Paper (Standard)	636.9 × 919.0 (2,501)	0.252 (94/32)	(1.12 mm ²) (3.44%)
000180-1 Page (02) catalog	Green Paper (Standard)	636.9 × 919.0 (2,501)	0.252 (94/32)	(1.12 mm ²) (3.44%)
000180-1 Page (02)	Green Paper (Standard)	636.9 × 919.0 (2,501)	0.252 (94/32)	(1.12 mm ²) (3.44%)

Sorting order changing screen



Supporting visualization

Press Information Cloud

By centrally collecting, managing, and analyzing the operation data for each press, it is possible to visualize the operating conditions, production rates, and improvement targets for each printing process.



Production report

Displays production data such as sheet waste, operation rate, efficiency, and daily statements.



Press status

Displays the production status of a press.



Support for automation and labor reduction (use of AGV)

AGV (automated guided vehicle)

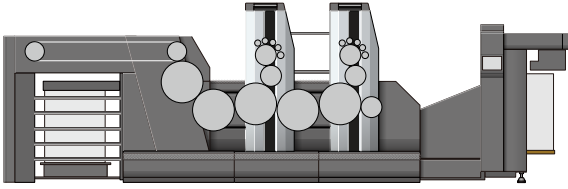
Based on the press operation status, Press Information Edge sends commands to the feeder section to supply sheets and to the delivery section to remove the printed sheets. In accordance with those commands, sheets are automatically supplied and printed sheets are automatically removed and transported to the next process.

Note: For inquiries regarding AGVs and the required interface arrangement for use overseas, please contact an RMGT distributor or the International Sales and Marketing Dept.

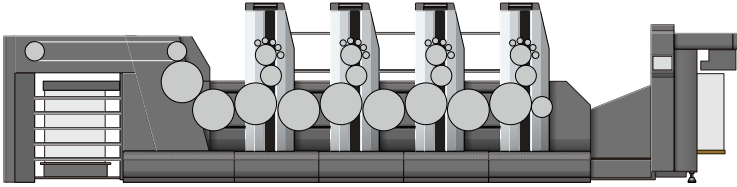
Combination Chart

920ST straight presses

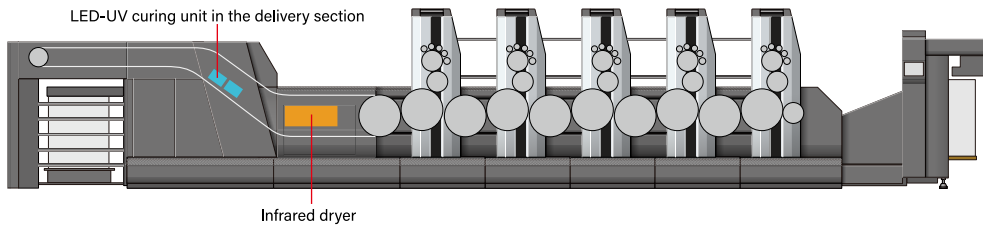
920ST-2 + standard delivery



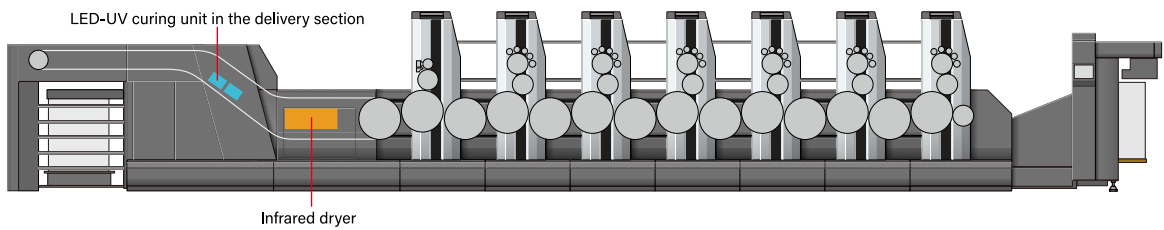
920ST-4 + standard delivery



920ST-5 + IR + LED-UV + semi-long delivery

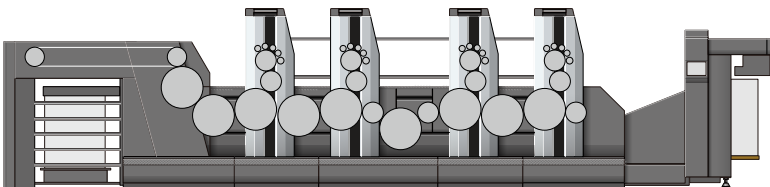


920ST-6 + coating unit + IR + LED-UV + semi-long delivery

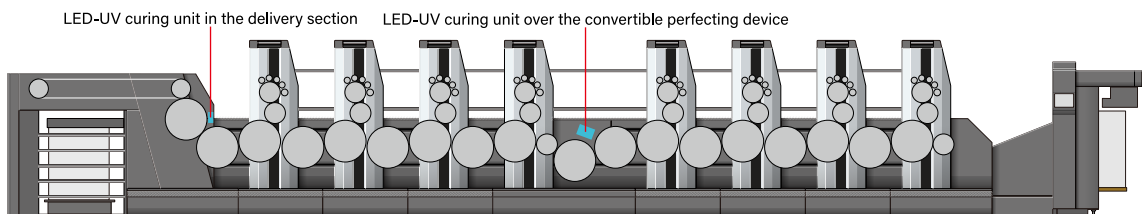


920PF convertible perfectors

920PF-4 + standard delivery



920PF-8 + LED-UV + standard delivery



Specifications

920 model

	920ST-2 / 920PF-2	920ST-4 / 920PF-4	920ST-5 / 920PF-5	920ST-6 / 920PF-6	920PF-8	920PF-10	
Number of printing units	2 (2/0, 1/1)	4 (4/0, 2/2)	5 (5/0, 4/1) 5 (5/0, 3/2)	6 (6/0, 5/1) 6 (6/0, 4/2)	8 (8/0, 4/4)	10 (10/0, 5/5)	
Cylinder arrangement of the convertible perfecting device	Standard: single-, double- and single-diameter cylinder arrangement Option: double-, double- and single-diameter cylinder arrangement				Double-, double- and single-diameter cylinder arrangement		
Max. sheet size	920ST (straight press): 640 × 920 mm (25.20" × 36.22") 920PF (convertible perfecter): [straight printing] 640 × 920 mm (25.20" × 36.22") [perfecting] 635 × 920 mm (25" × 36.22")						
Min. sheet size	920ST (straight press): 290 × 410 mm (11.42" × 16.14") 920PF (convertible perfecter): [straight printing] 290 × 410 mm (11.42" × 16.14") [perfecting] 370 × 410 mm (14.57" × 16.14")						
Max. printing area	615 × 900 mm (24.21" × 35.43")						
Paper thickness*1	920ST (straight press): 0.04 – 0.6 mm (0.0016" – 0.024"), 920PF (convertible perfecter): 0.04 – 0.4 mm (0.0016" – 0.016")						
Max. printing speed*2	920ST (straight press): 16,200 S.P.H. 920PF (convertible perfecter): 13,000 S.P.H.						
Plate size	665 × 910 mm (26.18" × 35.83") [positioning pitch: 780 mm (30.71") Plate thickness (cylinder packing total): 0.44 mm (0.017")						
Blanket size	Blanket size: 682 × 941 × 1.95 mm (26.85" × 37.05" × 0.077") [Cylinder packing total: 2.55 mm (0.1")]						
Feeder and delivery pile capacity	Feeder: 930 mm (36.61") (Including the height of pallet) Delivery: 1,030 mm (40.55") (Including the height of pallet)						
Number of rollers	Ink rollers: 19 (form rollers: 4)/ unit Water rollers: 4 (form roller: 1)/ unit						
Non-printing area	10 ± 1 mm (0.39" ± 0.039")						
Dimensions	Length*3	5,954 mm (19'6") / 6,317 mm (20'9")	7,726 mm (25'4") / 8,089 mm (26'6")	8,612 mm (28'3") / 8,976 mm (29'5")	9,498 mm (31'2") / 9,862 mm (32'4")	11,878 mm (39')	13,650 mm (44'9")
	Width	3,010 mm (9'11")	3,010 mm (9'11")	3,010 mm (9'11")	3,010 mm (9'11")	3,274 mm (10'9")	3,368 mm (11'1")
	Height	1,870 mm (6'2")	1,870 mm (6'2")	1,870 mm (6'2")	1,870 mm (6'2")	1,870 mm (6'2")	1,870 mm (6'2")
Weight*3	12.6 t (27,778 lbs) / 13.6 t (29,983 lbs)	21.6 t (47,620 lbs) / 22.6 t (49,824 lbs)	26.1 t (57,540 lbs) / 27.1 t (59,745 lbs)	30.6 t (67,461 lbs) / 31.6 t (69,666 lbs)	41 t (90,389 lbs)	50 t (110,231 lbs)	

*1 Printable paper thickness may vary according to paper stock.

The maximum paper thickness on the 920PF is 0.4 mm and printing speed is 13,000 S.P.H. for both straight printing and perfecting.

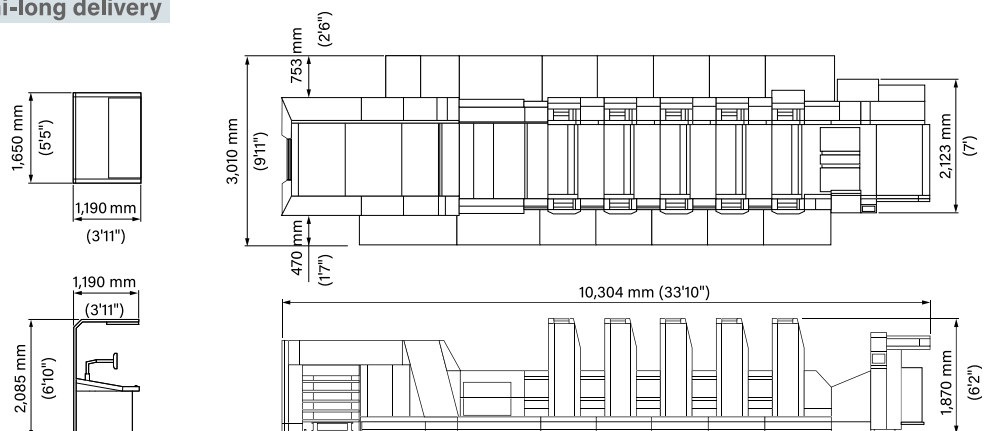
*2 The local conditions, ink and printing plate type, and the printing quality required will affect the maximum printing speed.

*3 The indicated specifications are for a standard delivery type press with no coating unit or peripheral devices.

Please contact an RMGT dealer or representative for detailed information on dimensions and weight for other press types.

Machine Dimensions

920ST-4 + coating unit + semi-long delivery





Design and specifications are subject to change without notice.

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please use the QR code to access the RMGT website.



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