



RMGT 9

A1-Size Offset Presses



920PF-8 (8-color convertible perfecter)

Providing optimum solutions for printers seeking cost savings The new RMGT 9 – regenerated with new styling and lineup

The new RMGT 9 of A1-size offset presses handles various print jobs with exceptionally high performance. Joining the proven 920 model with its extensive lineup, including convertible perfectors in up to ten colors, the 940 model is designed to accommodate an even wider range of jobs. This model is capable of running sheet sizes up to a maximum of 940 mm in width with a 930 mm wide printing image area and has successfully adopted many of the sophisticated functions found in the flagship RMGT 10. The high-speed separator, automatic nip checking function, and a host of other performance-enhancing features ensure that the RMGT 9 continues to deliver consistently high productivity.

RMGT 9
A1-Size Offset Presses



940ST-4 (A1-Size Straight 4-Color Press)



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

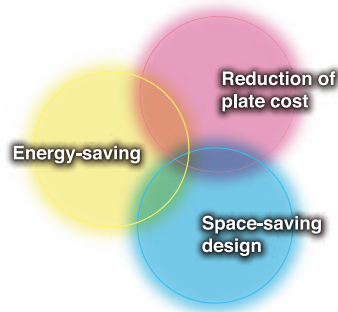
8-up printing of A4 size and letter size

RMGT 9 presses are most suitable for A1-size printing. Two models are available: the 920 for sheet size widths up to 920 mm (printing area of 900 mm width), and the 940 for sheet size widths up to 940 mm (printing area of 930 mm width).

Both models are designed to print 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.



Superior Cost Per



One pass full-color perfecting realizes high productivity.

The 920 model can be equipped with an automatic convertible perfecting device. Printing both sides of a sheet in one pass realizes high productivity. Moreover, installing an LED-UV curing unit at the convertible perfecting device and in the delivery enables instant drying of both sides of the sheet, eliminating wait time before the job can be sent off for finishing.

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



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

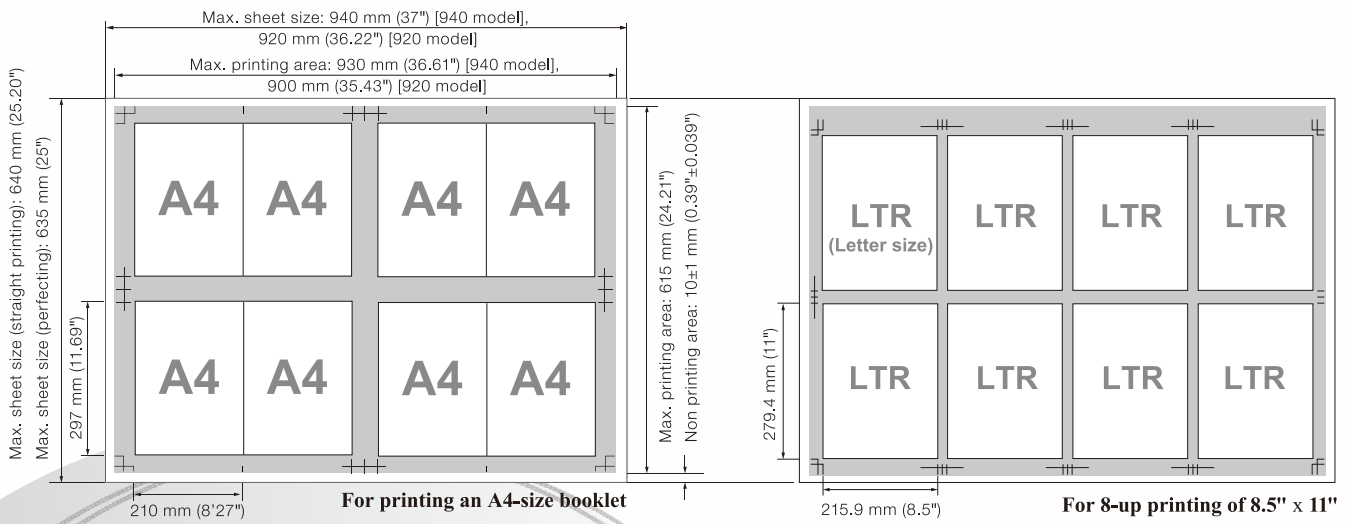


LED-UV curing unit

Movable coating unit

With a movable varnish coating unit, the coating cylinder and anilox roller can 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 next jobs—such as cleaning the coating cylinder or changing the blanket—to be performed even during printing.





formance to Accelerate Jobs



920PF-8 (8-color convertible perfecter)

High Productivity with Minimum Makeready Time

- Fast, precise plate changing
- Program Inking supplies the right amount of ink as soon as printing starts
- Prepress data is utilized for easier ink control
- Automatic cleaning devices reduce time and labor
- Easier roller nip pressure checking function

Supports High Quality Printing of Multiple Jobs

- 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 needs for diversified value-added printing

Centralized Management of Printing Quality and Productivity

- Press information display for checking press operation status at the delivery (option)
- Centralized management and control of printing and data from PCS-G
- Automated printing density control and consistent printing quality
- Digital workflow

LED-UV Curing System Improves Productivity with High Environmental Performance

- 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 automatic roller nip checking function that reduces maintenance work.



High Productivity with Minimum Makeready Time

The key to higher productivity for diverse short-run printing is shorter makeready time. With Program Inking for quick and easy color setting, an automatic plate changer and automatic cleaning devices, the majority of makeready work is fully automated.

Fast, precise plate changing

SPC semiautomatic plate changer comes as standard and allows plates to be changed quickly and accurately. Plate changing can be automated with the Smart-FPC* and FPC* fully automatic plate changer for even greater work efficiency.

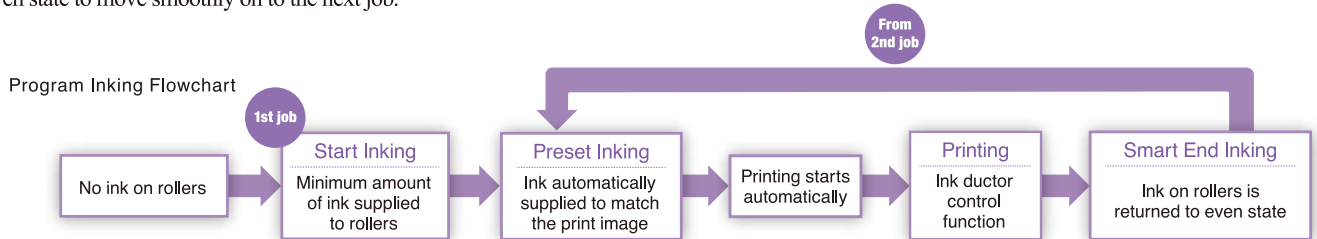
* Option



FPC fully automatic plate changer

Program Inking supplies the right amount of ink as soon as printing starts

Ink is automatically supplied to match the print image. After the 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.

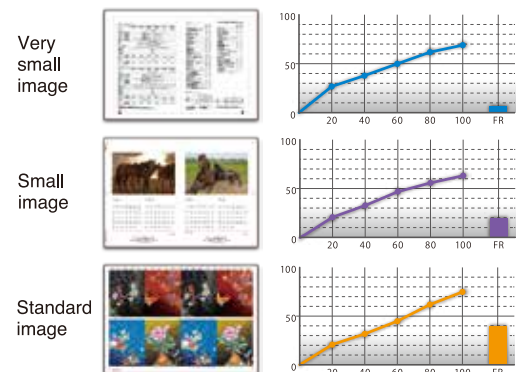


Prepress data is utilized for easier ink control

By analyzing pre-press data with PPC Server III (or Ink Volume Setter)*, the ratio of the image area is calculated. Based on the image area data, the PCS-G printing control system automatically selects the conversion curve for each color, sets the opening of the ink fountain keys, and controls the ink rollers.

* Option

Automatic selection of conversion curves



Vertical axis: Ink key opening Horizontal axis: Image area ratio (%) FR: Ink fountain roller feeding volume

Automatic cleaning devices reduce time and labor

The automatic blanket and ink roller cleaning devices* can be centrally controlled from the PCS-G printing control system, including setting the start of cleaning for each printing unit and selecting the cleaning pattern according to the amount of cleaning required.

* Option



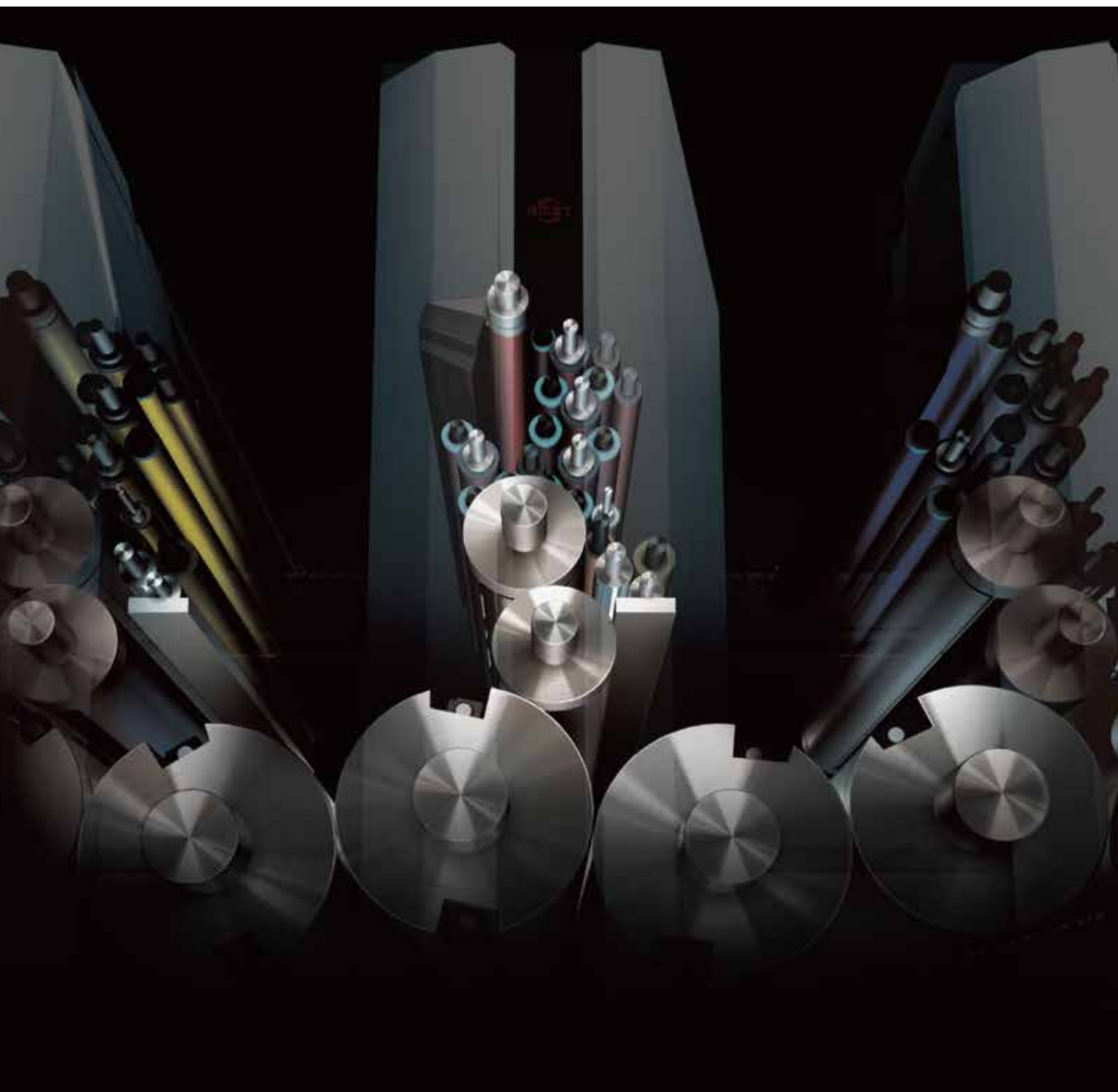
Automatic blanket cleaning device

Easier roller nip pressure checking function

The one-touch nip pressure adjustment position cue function and automatic roller nip pressure checking function vastly reduce the amount of labor required during maintenance work. Nip checking is remarkably easier on the press with the nip checking mode that prints actual nip width on a single sheet pass.



Maintenance mode screen



Supports High Quality Printing of Multiple Jobs

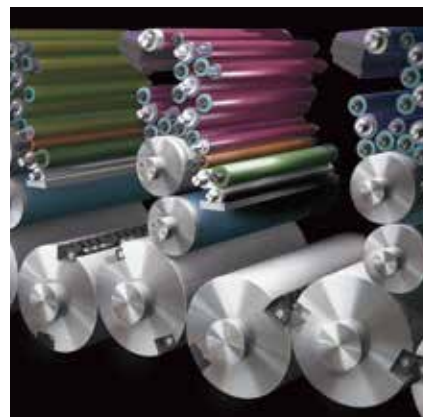
The RMGT 9 employs the same advanced air management technology found in all RMGT 10 presses to enhance sheet transfer accuracy.

Stable printing quality and color reproduction are maintained by employing high precision mechanisms built with the toughness and durability that retain printing precision over long periods of time.

Multiple jobs are supported by an uncompromising standard of press performance.

Double-diameter cylinders ensure stable sheet transfer

The printing unit consists of the 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 offers a wide range of applications from poster to package printing.



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.

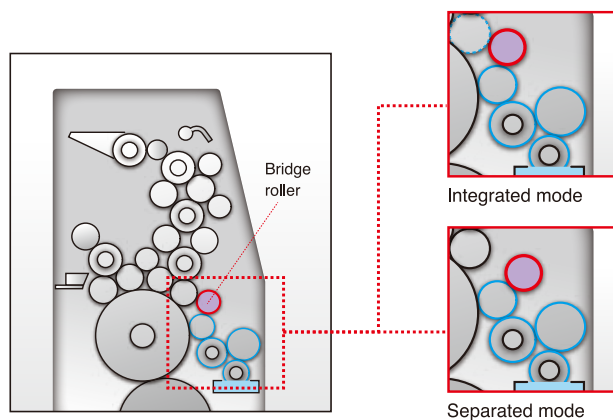
* Option



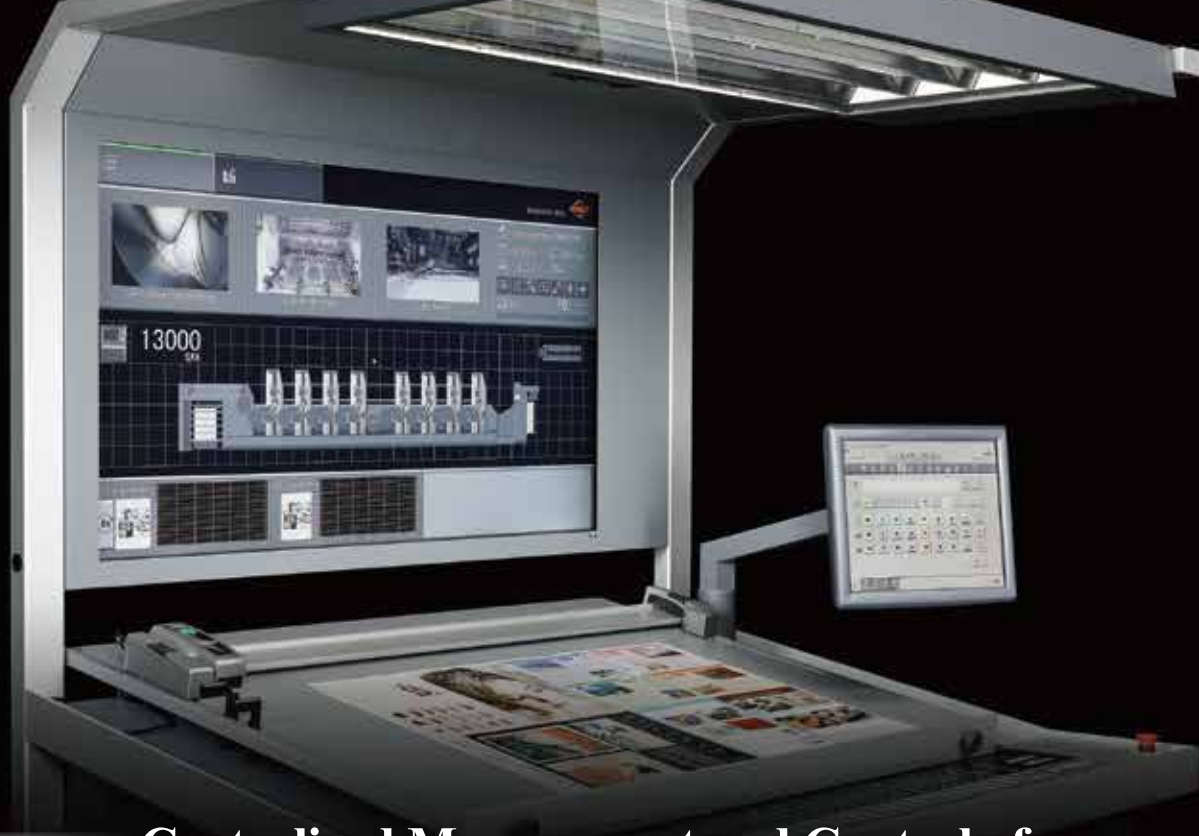
Advanced dampening system for an optimized balance of water and ink

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, in order to exactly match 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



Centralized Management and Control of Printing Quality and Productivity

The RMGT 9 forms an integral part of the optimal digital work flow centered on the Printing Management System or PCS-G. With connections to an MIS designed for CIP4-JDF, a color management system linked to pre-press data, and other pre- and post-press functions, centralized management and control of printing quality and productivity is realized in the optimization of printing operations.

Press information display* for checking press operation status at the delivery

Real-time viewing of sheet transfer by press-mounted video cameras is available on the live-view monitor at the press operation console. The information display features a monitoring function to show ink key supply volumes, image area data, job progress, print density measurement results, and operating conditions of safety devices. The screen can be viewed on a tablet connected to a Wi-Fi network, allowing remote operation at locations away from the delivery section.

The press information display contributes to a comfortable operational environment. (Normally, three cameras are installed, but up to a maximum of ten can be accommodated.)



Density measurement monitor



Live-view monitors

* Option

Centralized management of printing and data from PCS-G

The PCS-G printing control system acts as a printing control center, provides centralized management of entire processes from makeready to printing completion, including ink density adjustment, registration, color adjustment, water control, printing settings, cleaning and other operations. It also allows centralized management of operation and maintenance information such as maintenance history and press operation logs.

Automated printing density control and consistent printing quality

The optional PDS-E SpectroJet* and PDS-E SpectroDrive* printing density control systems use a spectrophotometer to measure the color bar on a printed sheet and calculate the correction values as the difference between the printed sheet and OK sheet. These correction values are then fed back to the PCS-G to automatically control the opening and closing of the ink fountain keys for much faster color matching. A preset number of sheets are also sampled and measured during printing; this data is fed back to the PCS-G to minimize density fluctuations and maintain consistent printing quality from start to finish.

* Option



PDS-E SpectroDrive

Digital Workflow

A digital workflow can be established to integrate the entire press room, prepress, and other internal sections. With the IPC and PPC servers as an interface, you can not only implement MIS, CIP4 and JDF, but also easily connect to other management systems and prepress processes you have established separately.

MIS connection software (CIP4-JDF)*

MIS connection software connects a CIP4-JDF compatible MIS (Management Information System) and PCS-G printing control system for real-time printing process management.

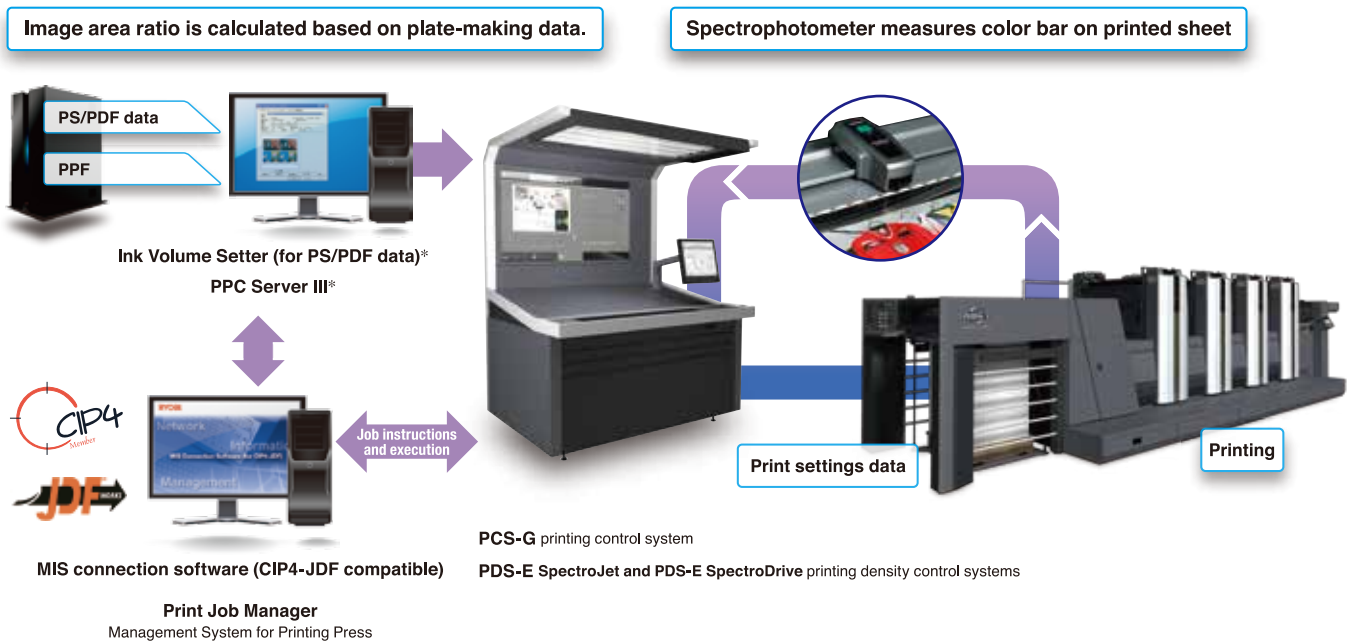
Print Job Manager*

The optional Print Job Manager press operation control system connects compatible presses via a network to manage the production schedule and transmit printing job data. It also collects data on press operating status in real time and automatically generates production analysis data.

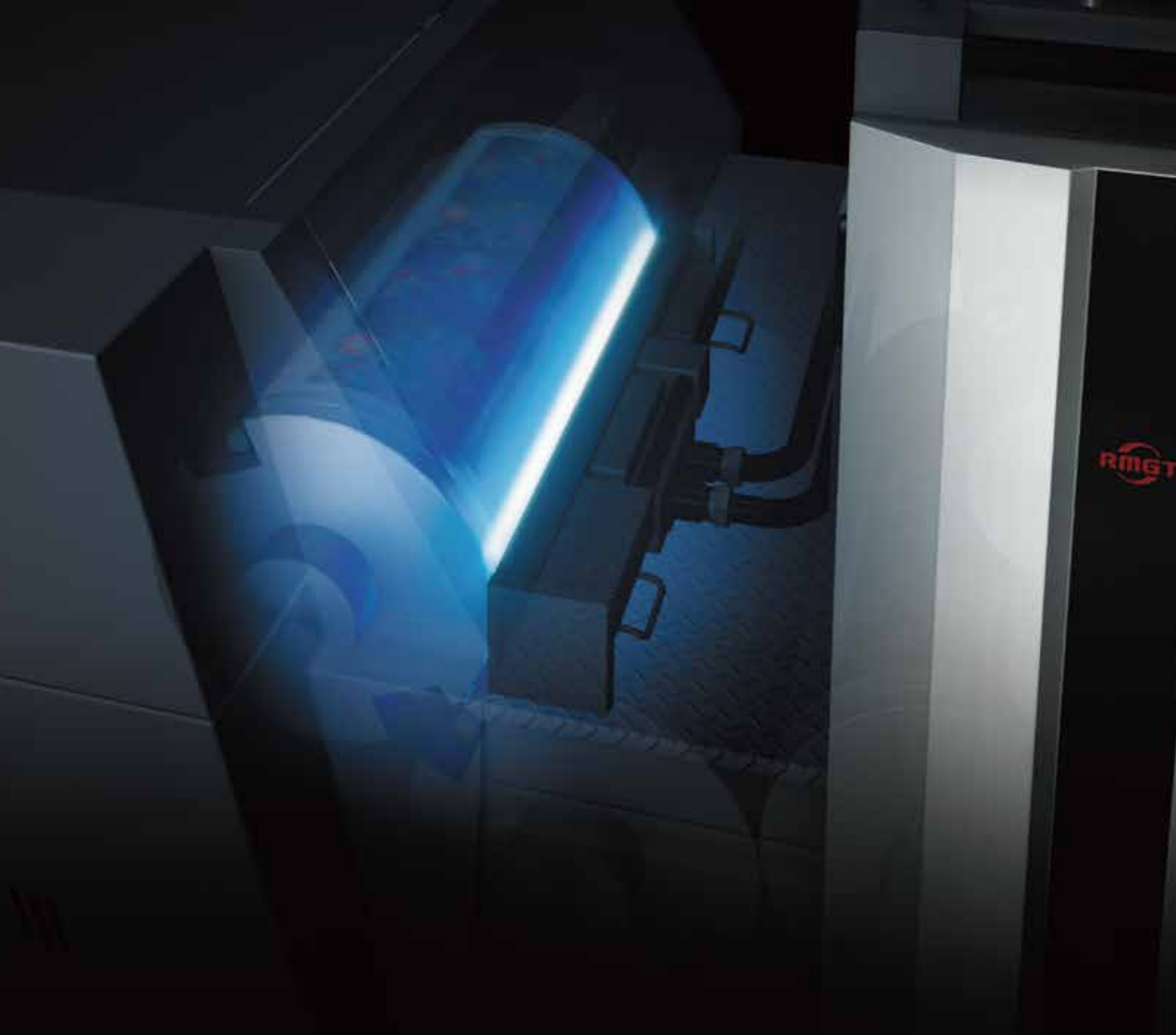
PPC Server (PPC Server III)*

This server converts image area ratio data generated by CIP3/CIP4-PPF and CIP4-JDF-enabled prepress systems and provides data on ink key opening volume.

*Option



* The Ink Volume Setter is for PS compatible prepress systems and the PPC Server III is for CIP3/CIP4 (PPF) compatible prepress systems.



- **LED-UV Curing System* Improves Productivity with High Environmental Performance**

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 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 10 percent* of that of conventional UV lamp system. In addition, the instant on and off of LED-UV lighting eliminates the need for substantial standby power.

* In the case of the 920 model

Long-life light source

A conventional UV lamp system's light source lasts approximately 1,000 to 3,000 hours*, but the LED-UV curing system's light source has a long life of approximately 15,000 hours. Moreover, a conventional UV lamp system remains lit in standby mode during makeready work, shortening its life, while the LED-UV curing system remains completely off so light source life is unaffected.

* Life cycle of the UV lamp depends on such conditions as on and off frequency.

Ozone-less and low heat generation

The LED-UV operates within a UV wavelength where no ozone is generated, eliminating the ozone odor peculiar to UV printing. The minimal heat generated during curing reduces thermal impact on the printed sheets and eliminates the need for exhaust ducting.

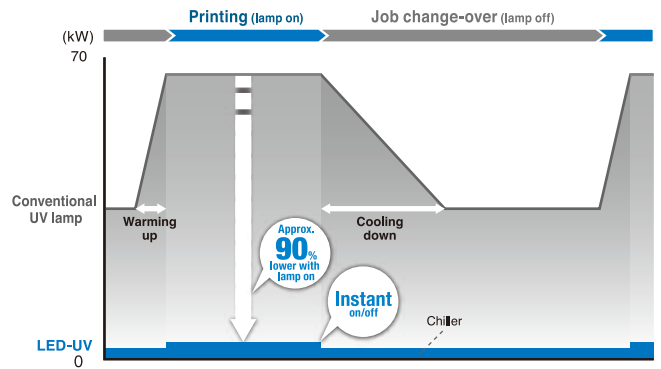
Varnish and special substrates for high-value-added printing*

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 paper, ink, varnish, drying unit and printing speed and etc.

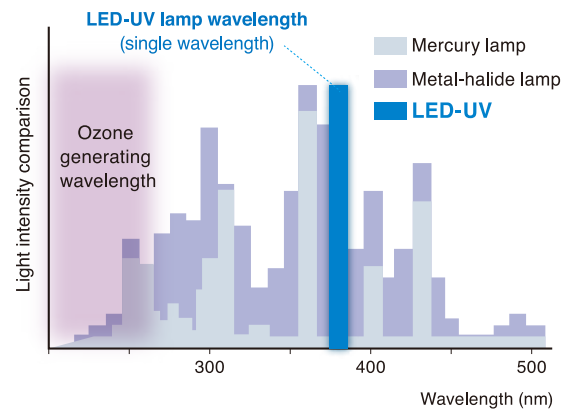
Power consumption vs. conventional UV lamp*

Major energy savings when printing (lamp on) and during job changeover (lamp off)

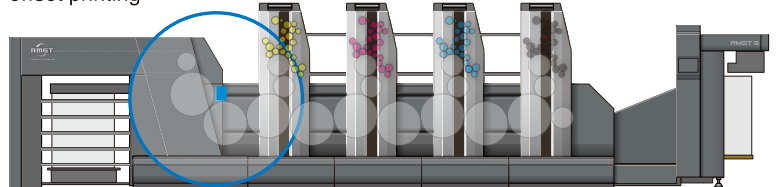


* In the case of the 920 model

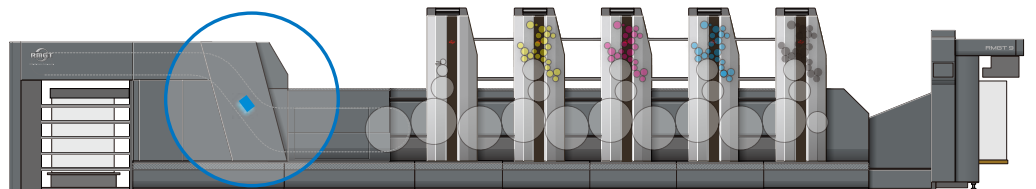
Wavelength comparison of LED-UV and conventional UV lamps



Instant drying for offset printing

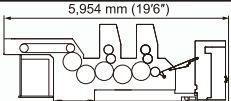
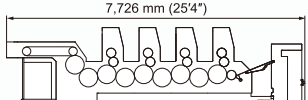
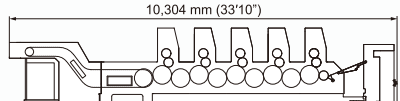
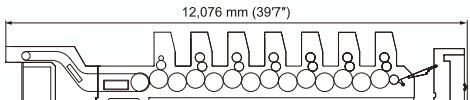


Instant drying for offset printing + varnish coating



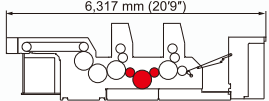
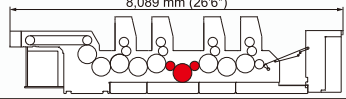
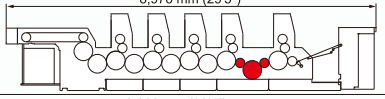
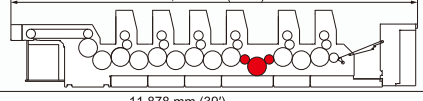
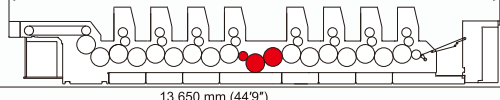
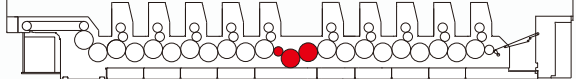
Various Model Lineups for Customer Applications

■ Combination Chart 920ST/940ST (straight press)

Number of printing units	Coating unit	Delivery		Dryer			Mechanical side view
		Standard delivery	Semi-long delivery	Infrared dryer	UV curing unit	LED-UV curing unit	
2	—	●	—	—	—	○*3	
2	—	—	●	—	○	—	
4	—	●	—	—	—	○*3	
4	—	—	●	—	○	○*4	
4	●*1	—	●	○*2	○	○*4	
5	—	●	—	—	—	○*3	
5	—	—	●	—	○	○*4	
5	●*1	—	●	○*2	○	○*4	
6	—	●	—	—	—	○*3	
6	—	—	●	—	○	○*4	
6	●*1	—	●	○*2	○	○*4	

● Standard ○ Option

■ Combination Chart 920PF (convertible perfector)

2 (2/0, 1/1)	—	●	—	—	—	○*3 ○*5	
4 (4/0, 2/2)	—	●	—	—	—	○*3 ○*5	
5 (5/0, 4/1)	—	●	—	—	—	○*3 ○*5	
5 (5/0, 3/2)							
6 (6/0, 5/1)	—	●	—	—	—	○*3 ○*5	
6 (6/0, 4/2)							
8 (8/0, 4/4)	—	●	—	—	—	○*3 ○*5	
10 (10/0, 5/5)	—	●	—	—	—	○*3 ○*5	

● Standard ○ Option

●●● Convertible perfecting device

*1: The coating unit allows of an aluminum bar type blanket only. *2: Infrared dryer with hot air
*3: LED-UV curing unit over the delivery drum *4: LED-UV curing unit in the delivery section
*5: LED-UV curing unit over the convertible perfecting device

(Note 1) The 920PF (convertible perfector) is not available with a coating unit, infrared dryer, UV curing unit or semi-long delivery.

(Note 2) Please consult your sales representative if you wish to install an LED-UV curing unit over the convertible perfecting device on the 920PF (convertible perfector).

(Note 3) The 940 models are not available with a convertible perfecting device.

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: 800 mm (31.5") Delivery: 900 mm (35.43")					
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	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)

■ 940 model*4

	940ST-4	940ST-5	940ST-6
Number of printing units	4	5	6
Max. sheet size	640 × 940 mm (25.20" × 37.01")		
Min. sheet size	290 × 410 mm (11.42" × 16.14")		
Max. printing area	615 × 930 mm (24.21" × 36.61")		
Paper thickness*1	0.04 – 0.6 mm (0.0016" – 0.024")		
Max. printing speed*2	15,000 S.P.H.		
Plate size	665 × 945 mm (26.18" × 37.20") [positioning pin pitch: 780 mm (30.71") Plate thickness (cylinder packing total): 0.44 mm (0.017")		
Blanket size	Blanket size: 682 × 955 × 1.95 mm (26.9" × 37.60" × 0.077") [cylinder packing total : 2.55 mm (0.1")]		
Feeder and delivery pile capacity	Feeder : 800 mm (31.5") Delivery: 900 mm (35.43")		
Number of rollers	Ink roller: 19 (form rollers: 4)/ unit Water rollers: 4 (form roller:1)/ unit		
Non printing area	10 ± 1 mm (0.39" ± 0.039")		
Dimensions	Length	7,726 mm (25'4")	8,612 mm (28'3") 9,498 mm (31'2")
	Width	3,045 mm (10')	3,045 mm (10')
	Height	1,870 mm (6'2")	1,870 mm (6'2") 1,870 mm (6'2")
Weight*3	21.9 t (48,281 lbs)	26.4 t (58,202 lbs)	30.9 t (68,123 lbs)

*1: Printable paper thickness may vary according to paper stock. The maximum paper thickness on the 920PF is 0.4 mm for both straight printing and perfecting.

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

*3: The indicated weight is for a standard delivery type press without a coating unit and does not include peripheral devices.
Please contact an RMGT dealer or representative for detailed information on dimensions and weight for other press types.

*4: The 940 models are not available with a convertible perfecting device.

Main Equipment ●: Standard ○: Option

	920 model	940 model		920 model	940 model
Vacuum feeder board	●	●	Impression pressure preset system (includes program-controlled impression cylinder cleaning function) ^{*1 *2}	○	○
Pull side guide preset system	●	●	Sheet size preset ^{*1}	○	○
Side lay sensor	●	●	Pneumatic side lay device ^{*1}	○	○
Front-lay Bernoulli device	●	●	Timing checker (add-on type)	○	○
Front-lay micro adjustment device (manual)	●	●	Smart-FPC fully simultaneous plate changer ^{*1}	○	○
SPC semiautomatic plate changer	●	●	FPC fully automatic plate changer ^{*1}	○	○
Plate register remote control device (vertical, lateral, diagonal)	●	●	Delivery fan electrostatic eliminator	○	○
PCS-G Printing Control System	●	●	Chiller for dampening solution	○	○
Program Inking (built into PCS-G)	●	●	Automatic dampening solution supply device	○	○
R-matic continuous dampening system	●	●	Cushion tank for dampening solution	○	○
Hickey picker	●	●	R-matic-D continuous dampening system with hickey removing function	○	○
Oscillating bridge roller	●	●	R-matic-D continuous dampening system with remote ON/OFF hickey removing function ^{*1}	○	○
Double sheet detector (mechanical)	●	●	Air center	○	○
Ultrasonic type double sheet detector	●	●	Ink oscillating form roller	○	○
Skewed sheet detector	●	●	Automatic ink roller cleaning device ^{*1}	○	○
Front-lay sheet stop	●	●	Ink roller temperature control system ^{*1}	○	○
Sheet transfer jam detector	●	●	Super blue	○	○
Delivery jam detector	●	●	Infrared dryer ^{*1} / UV curing unit ^{*1}	○	○
Delivery air guide plate ^{*3}	●	—	LED-UV curing unit ^{*1}	○	○
Electrostatic eliminator	●	●	Chamber type doctor blade coating system	○ ^{*1}	● ^{*3}
De-curler	●	●	Image area calculating software	○	○
Powder spray	●	●	· PPC Server III	○	○
Preset repeat counter with batch function (electronic, 5-digit)	●	●	· Ink Volume Setter (for PS)	○	○
Machine counter (total number of machine rotations, 10-digit, non-resettable)	●	●	Printing density control system	○	○
Print counter (total number of printed sheets, 10-digit, non-resettable)	●	●	· PDS-E SpectroJet / PDS-E SpectroDrive	○	○
OK monitor	●	●	IntelliTrax connecting set	○	○
Board insertion device	●	●	MIS connection software (for CIP4-JDF)	○	○
Delivery section safety area detector	●	●	Press information display	○	○
Nonstop feeder ^{*1}	○	○	Print Job Manager	○	○
Pile carrier plate ^{*1}	○	○	RP920-780MB high-precision register punch with plate bender	○	○
Nonstop pile carrier plate ^{*1}	○	○	TY-80MB-9 plate bender	○	○
Sheet pre-loader	○	○	Photo type delivery pile lowering sensor	○	○
Automatic feeder pile lateral alignment function ^{*1}	○	○	Rear alignment bar ^{*1}	○	○
Paper feed cylinder fan-out adjustment mechanism	○	○	Tape inserter	○	○
Special sheet feeding set	○	○	EQD earthquake detection unit	○	○
Automatic blanket cleaning device ^{*1}	○	○			

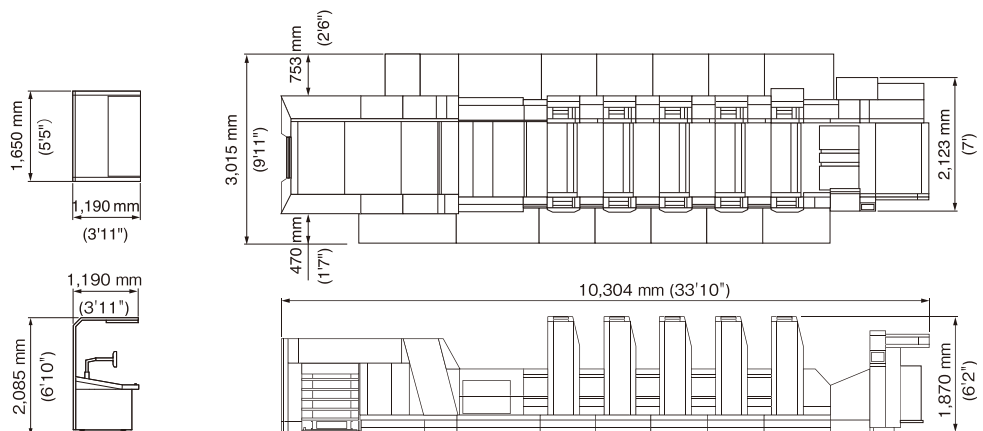
*1 Factory installation only

*2 The program-controlled impression cylinder cleaning function requires an optional automatic blanket cleaning device.

*3 Models with coating unit

Machine Dimensions

920ST-4+CC+SLD



Design and specifications are subject to change without notice.

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