

## Press Specifications

Number of Colors	4	
Printing Speed	1,500- 7,000 S.P.H. Local conditions, ink, stock and printing quality required will affect maximum printing speed.	
Max. Paper Size (W x L)	340 x 460 mm (13.39" x 18.11")	
Min. Paper Size (W x L)	90 x 100 mm (3.54" x 3.94")	
Max. Printing Area (W x L)	330 x 450 mm (12.99" x 17.72")	
Paper Thickness	0.06- 0.3 mm (0.0024"-0.012")	
Number of Imaging Units	2: ProFire <sup>®</sup> Excel Imaging System (from Presstek, Inc.)	
Laser Spot Size	16 micron (2,540 dpi)	
Number of laser diode	24	
Imaging Time	approx. 4 min. 30sec	
Plate Material	ProFire <sup>®</sup> Digital Media (Waterless plate)	
Number of Plates	Min: 28 per roll	
Plate Setting	Auto plate advance mechanism	
Feeding System	Universal feeder	
Feeder Pile Capacity	400 mm (15.75")	
Delivery Pile Capacity	Standard: 400 mm (15.75"), with UV Curing Unit: 450 mm (17.72")	
Registration System	Push side guide, front lay	
Infeed System	Underswing gripper, paper feed drum	
Number of Rollers	15 (form rollers: 4) per unit	
Gripper Margin	9 mm (0.354")	
Power	Standard	3-phase 200V 50/60Hz 60A or other voltages
	Press with UV curing unit	3-phase 200V 50/60Hz 52A (press) or other voltages 1-phase 200V 50/60Hz 115A (UV curing unit) or other voltages 3-phase 200V 50/60Hz 34A (UV temperature control system box) or other voltages
	Power Consumption	Standard 17.5kW Press with UV curing unit 14.5kW (press) 20kW (UV curing unit), 10kW (UV temperature control system box)
Recommended Operating Environment	Room temperature: 20-25°C Relative humidity: 50-60%	
Dimensions (LxWxH)	3,230 x 2,685 x 1,665 mm (10'7" x 8'10" x 5'6")(standard) 4,325 x 4,145 x 1,820 mm (14'2" x 13'7" x 6")(with UV curing unit) including foot step, operation stand, and peripheral equipment	
Weight	4,500 kg (9,950 lbs)(standard) 6,050 kg (13,350 lbs)(with UV curing unit) including foot step, operation stand and peripheral equipment	

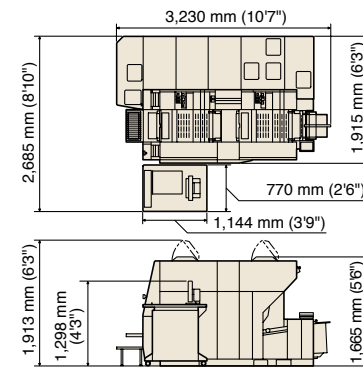
## SV770 (RIP) Specifications

Software RIP	Harlequin RIP
Operating System	Windows 2000 Server
CPU	Intel Xeon 2.4GHz
Hard Disk	36GB (36GB x 1)
Memory	512MB
Network	1,000 Base-T/ 100Base-TX/ 10 Base-T
Input Language	PostScript, PDF
Pre-installed Fonts	35
CRT Monitor	17-inch (color)
CD-ROM Drive	Max. 48x speed
Floppy Disk Drive	2-mode 3.5-inch

## Press Equipment and Accessories

Standard Equipment
<ul style="list-style-type: none"> <li>• RYOBI Program Inking</li> <li>• Image area ratio data calculation function</li> <li>• Cooling device for imaging unit and control unit</li> <li>• Ink roller temperature control system (ink fountain rollers, ink oscillating rollers)</li> <li>• Automatic ink roller cleaning device</li> <li>• Automatic blanket cleaning device</li> <li>• Plate cleaning device</li> <li>• Front lay vertical/ diagonal image micro adjustment mechanism</li> <li>• Impression cylinder air blower guide</li> <li>• Infrared dryer</li> <li>• Pre-pile device</li> <li>• Paper feed table motor drive</li> <li>• Delivery table motor drive</li> <li>• Spray device</li> <li>• Decurling device</li> <li>• Suction wheels</li> <li>• Delivery paper pull-out device</li> <li>• Delivery jam detector</li> <li>• Static eliminator</li> <li>• Double sheet detectors (mechanical, electronic)</li> <li>• Total counter</li> <li>• Machine counter</li> <li>• Preset repeat counter</li> <li>• OK monitor</li> <li>• Centralized oiling system</li> <li>• Safety covers</li> <li>• Safety bars</li> <li>• Ink roller clean-up attachments</li> <li>• Foot step</li> </ul>
Optional Accessories
<ul style="list-style-type: none"> <li>• RYOBI PDS-E printing density control system</li> <li>• RYOBI PDS-ProE printing density control system with color profile setter</li> <li>• Multi-size paper pile board</li> <li>• Plate saver kit</li> <li>• UV curing unit (Factory installation only)</li> <li>• High performance powder spray device</li> <li>• FM screening</li> <li>• RYOBI DI Converter</li> </ul>

## Mechanical Dimensions



- DI is a registered trademark of Presstek, Inc.
- Macintosh is a registered trademark of Apple Computer, Inc.
- Harlequin RIP is a registered trademark of Global Graphics Software Ltd.
- Windows is registered trademark of Microsoft Corporation in the United States and other countries.
- PostScript is registered trademark of Adobe Systems Incorporated.
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Design and specifications are subject to change without notice.  
Specifications may differ slightly depending on the country.

# RYOBI<sup>®</sup>

# RYOBI 3404X-DI

A3-Size Portrait Format 4-Color Offset Press with  
Built-in Direct Imaging

**NEW**

PRESSTEK  
**DI**

Some optional accessories are included in the photo.



# RYOBI<sup>®</sup>

## RYOBI LIMITED

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Order No. H5354 01 04

Printed in Japan



# Get the Fast Speed of Digital with the High Quality of Offset Printing

**An offset press incorporating advanced digital imaging technology**  
**— The RYOBI 3404X-DI is always a step ahead of the short-run color printing market!**

Direct data transfer, shorter lead times, small lot orders, higher printing quality — today's customers are making endless demands. The RYOBI 3404X-DI digital offset press meets such demands by directly utilizing prepress data to quickly print the number of sheets needed with uniform high quality. This state-of-the-art press was jointly developed by Ryobi and Presstek, Inc. of the United States. The popular direct imaging system was upgraded to achieve even higher

print quality. Higher productivity through direct printing of received data, plus user-friendly operation achieved through extensive automation, are combined with the high printing quality of offset printing. By flexibly meeting the needs of the rapidly growing short-run color printing market, the 3404X-DI is generating exciting new business opportunities for today's printing companies, as well as color separators and service bureaus.

## Direct Imaging System

Presstek's newly developed ProFire<sup>®</sup>Excel Imaging System is equipped with two imaging heads with built-in lasers. The two imaging heads can simultaneously burn the plates for four colors with precise registration on each plate cylinder. The laser spot size\*<sup>1</sup> of 16 μm provides a resolution of 2,540 dpi, ensuring high-precision printing reproducibility. This imaging system can handle FM (stochastic) screening\*<sup>2</sup> and provides the flexibility to meet the growing demand for a diverse range of short-run color printing.

\*1: Spot size as measured on a ProFire<sup>®</sup>Digital Media plate after imaging.  
 \*2: Option

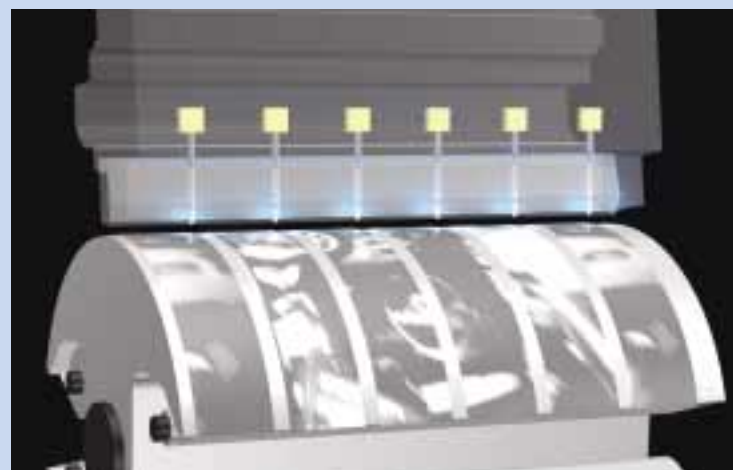
### Imaging

Each of the two imaging heads contains 6 laser modules, each of which emits 4 laser beams, so a total of 24 laser beams burn the image onto the plate. Imaging is completed in only about 4 minutes and 30 seconds.

## Waterless Plate (ProFire<sup>®</sup>Digital Media)

The 3404X-DI uses ProFire<sup>®</sup>Digital Media, a roll-type waterless plate. High-powered lasers form the print image on the plate. Each plate lasts for approximately 20,000 impressions, and will accommodate both short runs as well as longer, large-lot production.

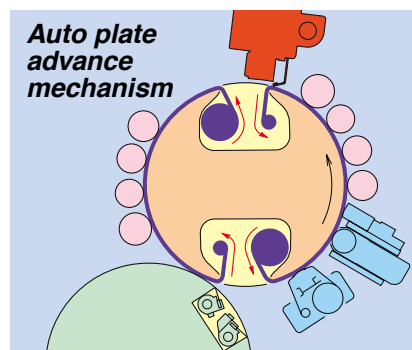
Note: The number of available plate impressions depends on printing conditions such as the type of ink and paper stock used.



Laser module

## Fully Automatic Plate Advance and Take-Up Mechanism

After four roll-type plates are set inside the plate cylinder gaps (one in each cylinder gap), the plates are advanced automatically and simultaneously. With single-button operation, new printing plates are positioned automatically, and used plates are wound onto take-up spools. An optional plate saver kit is available that will advance each individual plate the minimum length necessary according to image size of each color.

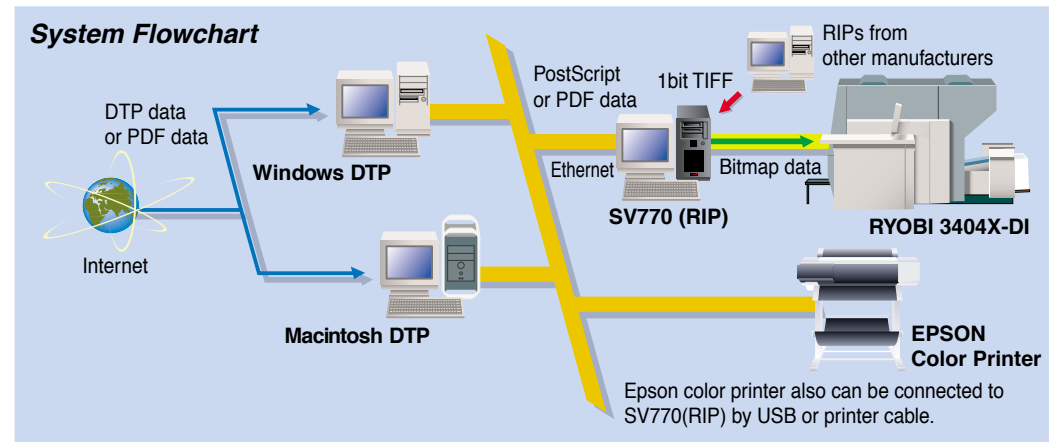


## Three Plate Cleaning Devices

Once imaging has been completed, plate cleaning is carried out by three devices — a dry cleaning device, a wet cleaning device and a vacuum, to remove residual silicone on the plate.

## System Flowchart

By incorporating the RYOBI 3404X-DI into corporate network environments, it can establish an ideal work flow for digitalization.



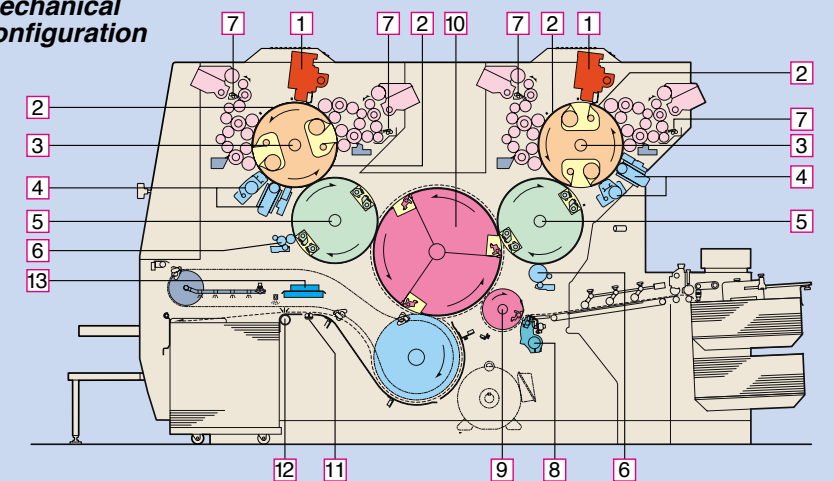
The RYOBI 3404X-DI can handle PostScript and PDF files created in both the Macintosh and Windows environments. The 3404X-DI is an open and flexible system that fuses the prepress and press processes. Features include the optional RYOBI DI Converter, which converts 1-bit TIFF data created on raster image processors (RIPs) from other manufacturers\* into 3404X-DI-ready print data.

\*For more detailed information on DI Converter compatible RIPs from other manufacturers, consult your RYOBI dealer.

## Compact Design Based on a Unique Cylinder Arrangement

The 3404X-DI uses a satellite V-shaped 5-cylinder system consisting of two sets of double-diameter blanket cylinders and plate cylinders, which rotate around a triple-diameter impression cylinder. Paper is tightly held by the impression cylinder grippers and rotated twice without a gripper change for precise 4-color printing. The large diameter of the impression cylinder reduces paper curling as well as damage to the printed material. Thanks to this cylinder arrangement, the RYOBI 3404X-DI achieves a compact design that's about the same size as a conventional 2-color press.

### Mechanical configuration



- |                                      |   |
|--------------------------------------|---|
| 1. Imaging head                      | 7. Automatic ink roller cleaning device |
| 2. Printing plate                    | 8. Underswing system                    |
| 3. Plate cylinder                    | 9. Paper feed drum                      |
| 4. Plate cleaning device             | 10. Impression cylinder                 |
| 5. Blanket cylinder                  | 11. Decurling device                    |
| 6. Automatic blanket cleaning device | 12. Suction wheel                       |
|                                      | 13. Infrared dryer                      |

## User-Friendly Operation Thanks to Automation

The RYOBI 3404X-DI is loaded with automated processes, from plate advance and imaging to making color adjustments— operations that once required high levels of experience and skill. All major operations are initiated and controlled from the operation stand. Its user-friendliness ensures that even operators with little experience can achieve quality printing in a short period of time.



Operation stand

## RYOBI PDS-E / RYOBI PDS-ProE

An optional RYOBI PDS-E printing density control system allows the numerical control of color tones based on the measured solid density of the color bar, without a need to rely on the experience and intuition of the operator. This ensures consistent print quality. An optional RYOBI PDS-ProE printing density control system with color profile setter performs color matching of the press printed sheet and the color proof sheet or the sheet printed by another press. This can establish a standardized print quality.

## RYOBI Program Inking

RYOBI Program Inking automatically supplies ink to the ink rollers to match the type of paper and image before printing begins. When the set number of prints have been finished, the ink on the rollers is automatically returned to an even state. Prior to printing, the ink in the ink fountains is kneaded to optimize the ink's viscosity so it is ready for printing. The precision ink control provided by Ryobi Program Inking ensures a more stable ink supply, shortens start-up time, and reduces paper waste.

### RYOBI Program Inking Flowchart

