

# BERTL

## EXCEPTIONAL



## Xerox ColorQube 9303



60 ppm Black-and-White; 55 ppm Color

Print • Copy • Scan • Fax

### Key Buyer Benefits

- Fast print and copy productivity
- High print resolution up to 600 x 600 dpi creates professional presentations, graphics and office documents
- PANTONE® approved color simulations that deliver accurate color
- Innovative touch screen features bright icons and intuitive navigation including embedded help videos that provide step-by-step directions for quick troubleshooting assistance
- Xerox Mobile Print Solution allows workers to print directly from their mobile devices and retrieve documents at a Xerox-enabled MFP with a secure confirmation code
- Color by Words enable users to adjust colors and optimize print quality
- Advanced scanning capabilities include Scan to Network, Scan to Email, Scan to Folder, Scan to SMB or FTP, Text searchable PDF, PDF/A, XPS, Linearized PDF, JPEG, TIFF, and Scan to USB memory device
- Fax forwarding feature lets users forward incoming faxes to an email address or a document repository as secure, searchable PDFs
- Flexible desktop and network utilities via Xerox's CentreWare® Internet Service delivers exceptionally easy to use device monitoring
- Xerox Extensible Interface Platform™ (EIP) allows document-related software applications to be accessed on the user interface to improve workflow and minimize time at the device
- Hybrid Color Plan offer customers with a three tier billing arrangement and metering options based on color coverage per page, showing new values for color cost per page pricing
- Three different optional finishers to choose from that offer advanced finishing options such as multi-position stapling, hole punching, saddle stitching and folding
- Monthly duty cycles of 300,000 pages and maximum paper capacity of 7,300 sheets
- Environmentally-responsible design offers 90% less supplies waste than comparable laser devices, fast warm-up and first copy out times, duplex and combine copy modes, low power consumption, earth smart feature, low noise levels, minimal ozone emissions and is ENERGY STAR and RoHS compliant.

## 100% INDEPENDENT ANALYSIS

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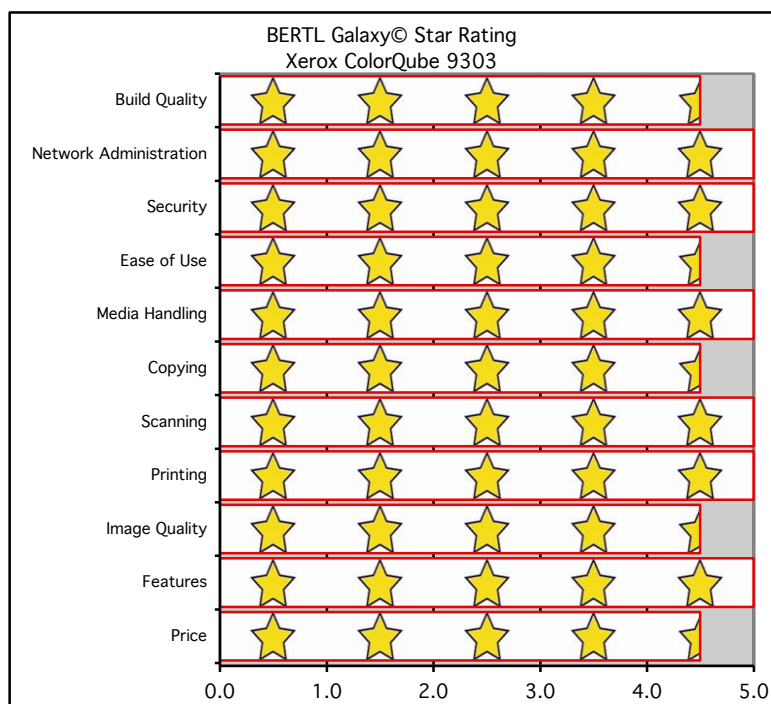
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### BERTL'S GALAXY® STAR RATING



OFFICE

## EXECUTIVE SUMMARY

Again, Xerox has impressed BERTL analysts with the design of the new ColorQube 9300 Series. This new series offers three core messages: low color page pricing, exceptional ease of use, cartridge-free components and is environmentally responsible. With its many new added features which include a 1.5 GHz processor, Color by Words feature, Scan to and Print from function, Smart Card email encryptions security, and High Speed mode, this device is truly a work of art in its own class. These innovative solid ink color MFPs deliver beautiful vibrant image quality and flexible print productivity. What makes the Xerox ColorQube 9300 series stand out is its Hybrid Color Plan which allows customers to choose different pricing plans enabling black-and-white and useful color pages to be at the same cost per page. During BERTL's extensive testing of the Xerox ColorQube 9303, this color ink-based MFP performed exceptionally well. BERTL observed the following when testing the Xerox ColorQube 9303:

- Good performance results when printing and copying in both black-and-white and color.
- Ability to change the print speeds and the image quality via Print Quality settings within the printer drivers.
- Image quality produced from the Xerox ColorQube 9303 was exceptional displaying vibrant colors, high resolutions, and smooth gradations with no banding.
- Color by Words tool provides intuitive color enhancement from the PostScript driver.
- Ease of maintenance was exceptional with the animated help videos, loading the ink sticks and clearing any misfeeds was effortless.
- Fast 1.5 GHz processor with a 160 GB Hard Drive for faster productivity.
- PCL and PostScript drivers feature bi-directional communication so that users can view device status from the print drivers. Both drivers also offer different speed options.
- New User Permissions feature restricts printing to users based on color, time of day, and job type, allowing administrators to better monitor who is using the device and save money.
- Xerox's Hybrid Color Plan offer customers with multi-tiered billing and metering options based on color coverage per page resulting in new standards for color per-page pricing.
- The ColorQube may slightly consume more energy per week than a laser but users will save money on the color printing cost using one of the Hybrid Color Plans.
- Xerox's CentreWare Internet Services, which provides detailed device and consumables' status, and provides network configuration, access management and accounting controls for administrators, is easy to use and very capable.
- Xerox Extensible Interface Platform (EIP) enables enterprises and developers to develop custom applications, accessible from the touch screen, that can automate and streamline frequent workflows, such as scan-and-distribute.
- Security features include: Secure Print, Authentication with NDS/LDAP/Kerberos/SMB, Hard disk overwrite security, Password Protected PDF, 256 bit Hard Disk Encryption, FIPS 140-2 Encryption, IPsec, 802.1X, SNMMP v3.0, and is Common Criteria Certified. Optional security features include: Xerox Secure Access Unified ID System®, USB card reader, and Common Access Card Enablement Kit.
- Versatile media handling and flexibility, with the ability to print on stock as heavy as 80 lb cover (220 g/m<sup>2</sup>) and paper sizes up to 12.6 x 18 in.
- Ability to expand paper capacity to up to 7,300 sheets.
- Duty Cycle up to 300,000 pages per month.
- Advanced finishing options that include booklet-making, stapling, hole-punching, and z-folding.
- The Xerox ColorQube 9303 is Energy Star compliant and uses cartridge-free solid ink sticks reducing the office waste by 90% for a greener environment.
- Managers will appreciate Xerox's support services, the ColorQube's ease of use and maintenance, support and training, job tracking/accounting capabilities, and the ease of device monitoring.

Considering the Xerox ColorQube 9303 MFP's superior overall performance in testing, excellent ease of use, and high-quality office-color image quality, BERTL awards the Xerox ColorQube 9303 its Five-Star *Exceptional* rating and highly recommends the device for mid-size to large offices that require a fully functional color MFP.

## INTRODUCTION

In May 2011, Xerox Corporation introduced the new solid ink multifunction ColorQube 9300 series. The ColorQube 9300 series is among Xerox's newest and fastest products that print, copy, scan and fax while incorporating the company's Extensible Interface Platform (EIP). EIP is based on Web standards and allows software developers, as well as customers, to create applications tailored to address specific business applications, such as automating routine scan-and-distribute applications. These versatile color MFPs have been designed to provide workgroups and businesses with an affordable document resource that speeds workflow and boosts productivity. With Xerox's Hybrid pricing plan it truly now makes color affordable for any user printing black-and-white and color at nearly the same cost per page. The distinctive metered price plans are based on the actual color used on the page. No more paying expensive full-color page prices for small amounts of color. Pages with useful amounts of color are billed at the same rate as black and white pages.

The Xerox ColorQube 9303 has a rated print speed of 60 ppm in black-and-white and 55 ppm in color with the ability to print from 38–85 ppm in color and black-and-white using the Flexible Print Speeds feature where users can choose a combination of image quality and speed with four different print settings: High Resolution, Enhanced, Standard, and Fast Color. The maximum monthly print volume is 300,000 pages with high ink yields of 10,000 pages per black stick and 9,250 pages per CMY stick. Six sticks can be loaded into the device, for a total of 55,500 pages and can be topped off at any time, even while printing. The ColorQube 9303 has flexible media capabilities with a maximum paper capacity of 7,300 pages, the ability to print on stock as heavy as 80 lb cover (220 g/m<sup>2</sup>) and paper sizes up to 12.6" x 18".

The new Xerox ColorQube 9303 color multifunction printer is designed to be easy on the environment and offers the following features:

- ENERGY STAR® and RoHS compliant
- Large full-color LCD touch panel with intuitive graphical display
- High quality output with 600 x 600 dpi resolution
- Built with Solid Ink technology that has a track record of reliability and simplicity in delivering outstanding color image quality
- Intelligent Ready technology learns the users workgroup's usage patterns so it is ready to print when the user is
- The Print Around feature holds a job needing resources, such as a different paper size, and prints the next job in the queue, increasing productivity

- Powerful 1.5 GHz CPU and 1 GB system memory plus 1 GB page memory (EPC), as well as a 160 GB hard disk drive for fast productivity
- Color By Words feature allows users to choose from a drop-down list and change the color of one object or area in a printout without affecting the rest of the page
- Standard 10/100/1000 BaseT Ethernet connectivity
- Using the Xerox Standard Accounting software, users can monitor not only the pages their office produces, but also who produced them. Users can manage access and gather data for print, copy, scan and fax output in black-and-white and color
- View job queues and check supply levels remotely with Xerox's embedded web page CentreWare®
- Users can send documents to multiple destinations with a single scan with the optional Xerox SMARTsend software
- Ability to print from or scan to any standard USB memory device instantly allows users a more portable way of accessing their documents
- Users can fax directly from their desktop with the LAN Fax feature which saves time and paper
- Advanced security features include Secure Print, Authentication with NDS/LDAP/Kerberos/SMB, Hard disk overwrite security, Password Protected PDF, 256 bit Hard Disk Encryption, FIPS 140-2 Encryption, IPsec, 802.1X, SNMMP v3.0, Common Criteria Certified, and optional Xerox Secure Access Unified ID System®, USB card reader, and Common Access Card Enablement Kit
- Superior finishing options including saddle stitching, multi-position stapling, hole punching and folding

This device is available in three configurations and sold exclusively through Xerox direct sales, resellers, agents and Global Imaging Systems. Pricing for each model in the series is as follows:

• Xerox ColorQube 9301	US \$22,299
• Xerox ColorQube 9302	US \$25,299
• Xerox ColorQube 9303	US \$28,299

In the following test report, BERTL takes an in-depth look at the Xerox ColorQube 9303, testing, and evaluating its productivity, in age quality and ease-of-use.

## **PRINT PRODUCTIVITY**

Evaluating print productivity is not as simple as timing copy jobs. The printing process involves several steps and can be affected by a variety of factors along the way.

The document must first be spooled by the print driver into a PCL or PostScript file. The PCL or PostScript file is then sent to the printer where it is raster image processed (RIPped) into image data by the device processor. The image data is then sent to the marking engine and output as printed pages.

It is possible to time and compare these factors through the use of careful preparation, conditioning and testing. Following are charts that show printing performance when tested under controlled conditions.

## **NETWORK PRINTING**

+ The Xerox ColorQube 9303 supports four print quality modes: High Resolution/Photo, Enhanced, Standard, and Fast Color. These print quality modes change the effective resolution that the document is printed at. Lowering resolution decreases the number of color pixels used to create an image, while increasing resolution increases the number of pixels used to create an image.

+ The Xerox ColorQube 9303's Rated Output Speed is 60 ppm in black-and-white and 55 ppm in color, and offers flexible print speeds from 38-85 ppm depending on the print quality mode used.

+ The Xerox ColorQube 9303's Time to First Page is as fast as 7.2 seconds in black-and-white and color.

+ The dedicated printer memory for the Xerox ColorQube 9303 is a respectable 1 GB system memory plus 1 GB page memory (EPC) and has a 160 GB hard disk drive.

+ The Xerox multitasking network controller handles multiple tasks with speed and efficiency due to its powerful network controller which has a processing speed of 1.5 GHz.

+ The ColorQube 9303 also provides users with a choice of multiple print drivers including Adobe® PostScript® 3™, PCL® 5c, PCL 6 emulation, PDF, XPS, and High Speed USB Direct Print.

+The ColorQube 9303 device also supports two innovative print drivers that can greatly simplify installing, managing, and supporting printers and multifunction devices on the network, and increase end-user productivity:

- Xerox Mobile Express Driver (X-MED) makes it easy for mobile users to find, use, and manage Xerox and non-Xerox devices in every new location. Connect to a

new network, and X-MED automatically discovers available printers and provides status and capability information. Users can save a list of "favorite" printers for each location and store application print settings for use on any printer in any network, all which greatly reduces mobile support calls to IT

- Xerox Global Print Driver (X-GPD) is a universal print driver that lets IT administrators install, upgrade and manage Xerox and non-Xerox devices from a single driver. It provides a consistent, easy-to-use interface for end-users, reducing the number of support calls, and simplifying print services management

+ Both of these drivers provide users with the following enhanced options:

- Printers are automatically discovered
- Printer list can be managed based on location
- Gives bi-directional feedback, device status, supplies and queue management

+ The ColorQube 9303 offers support for a wide array of operating systems which include Microsoft® Windows® XP (32- and 64-bit), Windows Server 2003 (32- and 64-bit), Server 2008 (32- and 64-bit), Windows Vista (32- and 64-bit), Windows 7 (32- and 64-bit), Mac OS 10.5-10.6 (PostScript only), Solaris® 9, 10, HP UX® 11, 11i, AIX 5, Linux RedHat® Fedora Core 1-7, Linux RedHat Enterprise Linux 4, SUSE® 10.X, Unix (English PPD only) and Citrix

+ In the Image Quality department, the ColorQube print drivers offer users several print resolution options which include: High Resolution/Photo – 600x600 dpi, Enhanced (auto-color mode) – 450x567 dpi, High Speed (black mode) – 450x500 dpi; Standard – 300x500 dpi and Fast Color – 225x450 dpi

+ Connectivity options for the 9303 include: 10/100/1000Base-T Ethernet, High-Speed USB 2.0 and Wireless Ethernet 802.11b (via third-party adaptors)

+ Supported Network Protocols include: TCP/IP, HTTP/HTTPS, Internet Printing Protocol, LPR/LPD, Raw Socket Printing/Port 9100, IPv4/IPv6, WSD, NetWare: Bindery and NDS IPX/SPX, NDPS®/NEPS (with Server Gateway), AppleTalk®: EtherTalk®, Microsoft Windows Networking over IP, Bonjour IPv6 and Secure FTP

+ Administrative Protocols supported include: DHCP, BOOTP, SNMP, WINS, DDNS, SLP® v2, HTTP, RARP, DHCP Autonet, SSL, and NTP

+ The Xerox ColorQube 9303 offers the following printer features: Print from USB, Automatic two-sided, Secure Print, Delay print, Earth Smart settings, Job identification, Sample set, Booklet creation, Cover selection, Inserts and exception pages, Paper selection by attribute, N-up, Watermarks, Banner sheets, Fit to new paper size, Transparency Separators, Output tray selection, Image quality, Store and recall driver settings, Reduce/enlarge, Mirror image, Bi-directional status, Scaling, Overlays, Print to Fax (requires optional Fax kit), Rotate image, and Job Monitoring.

## TEST RESULTS

All testing was done in the default Enhance Mode.

Network-Bandwidth/Print File Sizes			
File Name / Native File Size		PCL6	PostScript
1-page Digital Photo PDF	4.48 MB	14.20 MB	5.79 MB
4-page Passport Form PDF	0.08 MB	0.70 MB	0.52 MB
16-page Magazine in PDF	1.78 MB	15.30 MB	3.40 MB
22-page Excel Worksheet	0.12 MB	4.94 MB	4.80 MB
32-page Text-Based PowerPoint	0.23 MB	15.50 MB	2.00 MB
32-page Graphic Intensive PowerPoint	4.20 MB	36.7 MB	24.5 MB
32-page Graphic Intensive PowerPoint (duplex)	4.20 MB	36.7 MB	24.5 MB
38-page Form Word Document	0.91 MB	14.1 MB	13.6 MB
50-page Text-Based PDF	0.17 MB	2.07 MB	1.54 MB
50-page Text-Based PDF (duplex)	0.17 MB	2.07 MB	1.54 MB

Black-and-White Print Productivity			
# of Originals	Mode	PCL6	PostScript
50	Simplex	60.3 ppm	59.7 ppm
50	Duplex	53.8 ppm	53.9 ppm

Print productivity is evaluated based on a text based letter sized 50 page PDF file.

Color Print Productivity			
# of Originals	Mode	PCL6	PostScript
32	Simplex	55.0 ppm	55.1 ppm
32	Duplex	47.3 ppm	48.0 ppm

Color print productivity is evaluated based on a graphic based letter sized 32 page PPT file.

Job List	First Page Out Time (seconds)		Total Job Time (seconds)	
	PCL6	PS	PCL6	PS
1-page Digital Photo Print Original	14.14	21.27	14.14	21.27
4-page Passport Form PDF	10.70	12.71	14.45	16.96
16-page Magazine PDF	12.50	13.11	39.85	34.45
22-page Excel Worksheet	18.95	12.05	54.02	35.92
32-page Text-Based PowerPoint	19.05	13.71	56.11	53.58
32-page Graphic Intensive PowerPoint	10.21	10.76	44.02	45.22
32-page Graphic Intensive PowerPoint (duplex)	10.61	24.74	47.61	63.77
38-page Form Word Document	10.24	11.34	55.14	56.50
50-page Text-Based PDF	7.11	7.22	55.31	55.88
50-page Text-Based PDF (duplex)	7.64	7.99	61.02	61.30

Test files printed on Letter paper size (8.5" x 11").

Legal Print Performance	PCL6		PostScript	
	Simplex	Duplex	Simplex	Duplex
First Page Time (secs)	19.40	20.09	18.59	19.18
Total Print Time (secs)	232.77	262.90	232.21	270.83
Running PPM	28.1	24.6	28.1	23.8

Test files printed on Legal paper size (8.5" x 14"). Test is based on printing a 100 page document in simplex and duplex modes.

Tabloid Print Performance	PCL6		PostScript	
	Simplex	Duplex	Simplex	Duplex
First Page Time (secs)	18.43	21.37	23.64	24.18
Total Print Time (secs)	234.08	286.49	240.30	289.36
Running PPM	27.7	27.6	22.6	22.5

Test files printed on Tabloid paper size (11" x 17"). Test is based on printing a 100 page document in simplex and duplex modes.

## WHAT BERTL WOULD LIKE TO SEE

- BERTL was very satisfied with the Xerox ColorQube 9303 MFP's printing capabilities.

## WHAT BERTL LIKED

- Tested simplex black-and-white network-print speed with the PCL6 driver was as fast as 60.3 ppm and 59.7 ppm with the PostScript driver.
- Tested duplex black-and-white network-printer productivity was productive up to 53.8 ppm with the PCL6 driver and 53.9 ppm with the PostScript driver.
- Tested simplex color network-print speed with the PCL6 driver was as fast as 55.0 ppm and 55.1 ppm with the PostScript driver.
- Tested duplex color network-printer productivity was productive up to 48.0 ppm with the PostScript driver and 47.3 ppm with the PCL6 driver.
- Fast productivity when printing simplex legal sized documents with speeds up to 28.1 ppm using both the PCL6 and PostScript drivers.
- Fast productivity when printing simplex tabloid sized documents with speeds up to 27.7 ppm using the PCL6 driver.



## **COPY PRODUCTIVITY**

Advertised speeds are always quoted using the simplest route—in-and-out of a device. Of course, users often apply finishing options, incorporate different media sizes and types into the document, print in duplex, and add other elements that can affect speed. In the chart below, BERTL tests how different modes—mixed-size original mode and duplex mode—affect document-feeder productivity. In order to assess copier productivity, BERTL ran a series of copy jobs in order to determine document-feeder scanning speed, the affect of the first set out on overall engine speed, and whether specific job attributes affect engine throughput capability. Each job was set up by feeding media from the shortest media route to the shortest available output destination. A separate test examines how adding finishing/output destinations affects productivity.

## **COPY FEATURES**

+ The Xerox ColorQube 9303 supports two copy quality modes, equivalent to the Enhanced and High Resolution/Photo print modes. The behavior of the copy mode resolutions is the same as the print modes described in the print section.

+ The Xerox ColorQube 9303 comes standard with a Duplex Automatic Document Feeder (DADF) with capacity for up to 100 sheets.

+ Users can submit jobs that require simplex or duplex copying. The ColorQube 9303 supports copy jobs that require 1:1, 1:2, 2:2, and 2:1 side printing.

+ Users can make copies that range from 1 to 9,999 in quantity.

+ Xerox ColorQube 9303's Rated Output Speed is up to 60 cpm in black-and-white and 55 cpm in color in Enhanced mode.

+ The Xerox ColorQube 9303 Rated First Copy Out Time (FCOT) is as fast as 8.2 seconds.

+ Copy Resolution is set at 600 x 600 dpi.

+ The ColorQube 9303 can simultaneously copy, fax, and scan.

+ Users can use the variable zoom to scale from 25% to 400% in 1% increments.

+ Basic Copy Features included with the Xerox ColorQube 9303 incorporate the following: Collation, Automatic 2-sided/Duplex, Auto Reduction and Enlargement to fit selected paper size, Hole Punching, Booklet Creation, Stapling, Large Job Interrupt, Auto Paper Select, Auto Tray

Authentication for Services (i.e., Color Copy), Switching, and Features Help (Intuitive text and graphic descriptions).

+ Copy Output features include the following: Transparencies, Dividers, Booklet Creation, Multi-up (up to 15 columns by 15 rows), Invert Image (negative or mirror image), Covers, Build Job, Inserts and Tab insertion, Sample Set and Job Storage, and Heavy weight paper.

## **TESTING RESULTS**

<b>Automatic Document Feeder First Copy Out Time</b>	
<b>Time in Seconds</b>	
<b>Number of Originals</b>	<b>Black-and-White Mode</b>
1 Simplex Original	7.87
1 Duplex Original	13.46
<b>Color Mode</b>	
1 Simplex Original	13.08
1 Duplex Original	15.80

<b>Platen Glass First Copy Out Time</b>	
<b>Time in Seconds</b>	
<b>Number of Originals</b>	<b>Black-and-White Mode</b>
1 Simplex Original	8.14
<b>Color Mode</b>	
1 Simplex Original	8.80

<b>Copy Job Time</b>			
<b># of originals</b>	<b>Black-and-White Mode</b>	<b>Time In Seconds</b>	<b>CPM</b>
10	1 sided to 1 sided	23.62	25.4
10	1 sided to 2 sided	23.80	25.2
10	2 sided to 1 sided	42.64	14.1
10	2 sided to 2 sided	47.52	12.6
<b>Color Mode</b>			
10	1 sided to 1 sided	25.58	23.5
10	1 sided to 2 sided	27.02	22.2
10	2 sided to 1 sided	55.65	10.8
10	2 sided to 2 sided	58.02	10.3
<b>Auto Color Mode</b>			
10	1 sided to 1 sided	21.93	27.4

Copy Productivity (seconds)		
Mode	Black-and-White	Color
Simplex	60.12 cpm	53.20 cpm
Duplex	57.75 cpm	47.82 cpm

Copy productivity is evaluated based on a test using one text-based file copied 10 times.

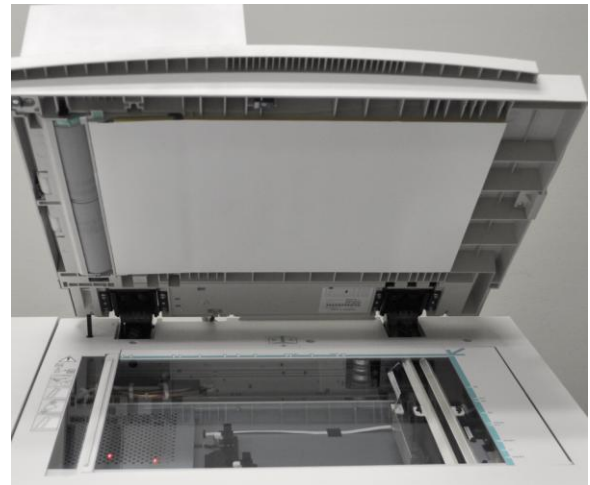
Document Feed Speed			
# of originals	Black-and-White Mode	Time In Seconds	OPM*
11	Simplex Originals	15.49	42.6
6	Duplex Originals	26.90	13.4
11	Mixed-Size Originals	21.15	31.2
Color Mode			
11	Simplex Originals	18.02	36.6
6	Duplex Originals	29.71	12.1
11	Mixed-Size Originals	27.55	24.0

\*Originals per minute.

Document-Finishing Penalty				
# of originals	Finishing Selection	Time In Secs	1 Set Time (Secs)	Penalty Per Set (Secs)
10/5	Corner Staple	73.86	21.07	0.51
10/5	Side Staples	96.18	25.53	0.19
8/5	Saddle-Stitch Booklet	191.84	44.66	2.10
10/5	Covers and Inserts	195.14	45.32	4.34



**Above and next column:** The Xerox ColorQube 9303 duplex automatic document feeder (DADF) and platen glass.



## WHAT BERTL LIKED

- In BERTL's Automatic Document Feeder performance copy test, the Xerox ColorQube 9303's First-Copy-Out-Time (FCOT) is as fast as 7.87 seconds in black-and-white and 13.08 seconds in color.
- In BERTL's Platen Glass performance copy test, First-Copy-Out-Time (FCOT), the Xerox ColorQube 9303's First-Copy-Out-Time (FCOT) is as fast as 8.14 seconds in black-and-white and 8.80 seconds in color.
- Tested simplex black-and-white copier productivity was up to 60.12 ppm, surpassing Xerox's rated copy speed of 60 cpm.
- Tested simplex color copier productivity was up to 53.20 cpm, closely matching Xerox's rated copy speed is 55 cpm.
- Tested duplex productivity was productive up to 57.75 cpm in black-and-white and 47.82 cpm in color.
- Minimal document-finishing penalty when applying corner and side stapling.
- Fast document-feeder speeds of up to 42.6 opm in black-and-white mode and 36.6 opm in color mode.

## WHAT BERTL WOULD LIKE TO SEE

- BERTL was satisfied with the ColorQube 9303's copying capabilities.

## SCANNING FEATURES

Scanning features available on the Xerox ColorQube 9303 allows users to move, manage, manipulate, capture, and distribute their documents via email, Internet fax, embedded fax, network server fax, or network scanning.

+ The ColorQube 9303 offers users the option to scan their jobs using the following color modes: Color Scanning, Grayscale, Black and White, and Auto Detect.

+ Users can scan while the system is copying, printing or while it is transferring scan data to a network or faxing jobs.

+ The input scanning speeds for the ColorQube 9303 is 60 ipm in color and up to 84 ipm in black-and-white when scanning 8.5" x 11" pages.

+ The Xerox ColorQube 9303 offers the following scan presets: Normal Quality for sharing and printing, archival, and simple scans with smaller files sizes, as well as High Quality for printing and OCR with larger file sizes.

+ This device offers several resolution options aimed at satisfying the most demanding customers. Options are: 600 x 600 dpi, 400 x 400 dpi, 300 x 300 dpi, 200 x 200 dpi, 200 x 100 dpi, 150 x 150 dpi, 100 x 100 dpi, and 72 x 72 dpi.

+ Basic scanning features included with the ColorQube 9303 include the following: Mixed size originals, Bound originals, Edge erase, Reduction/enlargement, Scan Build Job, Compression Quality/File Size Control, Original type (photo and text, photo, text, map, newspaper/magazine), Auto Background and Shadow Suppression.

+ The maximum scan area for the ColorQube 9303 is 11.7" x 17" (A3/297 x 420 mm).

+ Xerox provides users with a multitude of file format options which include: Color and Black and White TIFF, PDF or PDF/A (MRC, JPEG, G3 MH, G4 MMR, JBIG 2 Huffman, JBIG Arithmetic Compression, Deflate (for B/W and within MRC)), JPEG, XPS, Searchable PDF, PDF/A, XPS, Encrypted / Password Protected PDF and Linearized PDF.

+ User Authentication is supported with the following: Network ID's that supports Kerberos (UNIX, Windows Server 2003, Windows Server 2008), SMB (Windows Server 2003, Windows Server 2008), NDS, LDAP, Xerox Secure Access Unified ID System, and CAC/PIV.

+ The Xerox ColorQube 9303 is compatible with LDAP (Lightweight Directory Access Protocol), which allows it to browse address lists stored on a corporate network. When

a new name is added to the database, connected devices automatically have access to that name. This eliminates the need to maintain a separate address book for the ColorQube 9303.

+ This device supports the most commonly used network protocols which include: FTP via TCP/IP, Microsoft SMB via TCP/IP, Netware, and HTTP/HTTPS.

+ The ColorQube 9303 supports multiple scan destinations making it easy for users to route their documents to many destinations. Scan destinations include: Scan to Network Server, Scan to USB drive, Scan to Email, Scan to Client (SMB or FTP), Scan to Network Folder, Scan to Mailbox, and Scan to Home.

## OPTIONAL SCANNING SOFTWARE SOLUTIONS

+ Scan to PC Desktop Professional is optional desktop software that provides document imaging, archiving, editing and organization tools. Scan to PC Desktop Professional also includes the following software: Nuance PaperPort Professional, Nuance OmniPage Pro Office, and Nuance OmniPage Pro Office.

- Nuance PaperPort Professional is an excellent software solution which is used for image viewing and file management which includes complete PDF functionality and secures PDF workflow for all scanning applications.
- Nuance OmniPage Pro Office (for desktop/client installation) is another software solution which is used to perform OCR and file format conversions of scanned documents.
- Image Retriever provides fully automated retrieval of scanned images direct from a scan enabled Xerox ColorQube to individual desktops.

+ Xerox SMARTsend is an optional server-based document routing software that supports multiple scan-enabled multifunctional systems up to 250 per server and offers the following:

- Enables transformation, distribution, and routing of scanned documents with features like LDAP and auto discovery.
- Workflow creation via web browser-based task creation (destinations, devices, document attributes 20 file types including searchable PDF, workflow settings, and workflow summary).
- Scan to file destinations: Email, Novell Netware folder, Network folder, SMB folder, FTP, Web URL, and Remote printers.

- Scan to document repository destinations: DocuShare®, Domino, Domino.doc, and Microsoft SharePoint.
- Workflow initiation via device scanning user interface (template selection at device UI).

+ Xerox SMARTsend Professional is optional and offers the same features and SMARTsend as well as the following:

- Workflow initiation via Paperware (Scan cover sheets)
- Server-based Optical Character Recognition (OCR)
- Adding Metadata
- Scan to Internet fax file destination

## WHAT BERTL LIKED

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- Versatile features include: Scan to Network Server, Scan to USB drive, Scan to Email, Scan to Client (SMB or FTP), Scan to Network Folder, Scan to Mailbox, and Scan to Home.
- Scanned documents can be saved to TIFF, PDF or PDF/A, JPEG, XPS, Searchable PDF, XPS, Encrypted Password Protected PDF and Linearized PDF for optimum compatibility.
- LDAP compatibility enables users to access the network address book, making destination-management chores easier for network administrators.
- Eliminate errors by previewing and approving thumbnails of scanned documents before final output or distribution via Scan to Email or Scan to Folder.
- Promote multitasking and minimize time spent at the system with high-speed scanning up to 60 ipm in color and up to 84 ipm in black and white when scanning 8.5" x 11" sheets.

## WHAT BERTL WOULD LIKE TO SEE

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- BERTL was very satisfied with the ColorQube 9303's network-scanning capabilities, features and functions

## FAX FEATURES

The Xerox ColorQube 9303 comes standard with Internet Fax and Server Fax as well as an optional Walk up Fax with LAN Fax and Fax Forwarding options.

Internet Fax Features	
<b>Capability</b>	<ul style="list-style-type: none"> <li>• Direct document transmission to remote Internet fax machines or email clients (SMTP).</li> <li>• Reception and automatic printout of documents sent via email from remote Internet fax machines or email clients.</li> </ul>
<b>Maximum Scan Area</b>	11 x 17 in. (A3/297 x 420 mm)
<b>Address Directory Access</b>	<ul style="list-style-type: none"> <li>• Corporate address list via LDAPv3</li> <li>• Downloaded address list (comma-separated file format)</li> <li>• Internal LDAP or Public address book</li> </ul>
<b>File Formats</b>	PDF and Multi TIFF
<b>Resolutions</b>	600 x 600 dpi, 400 x 400 dpi, 300 x 300 dpi, 200 x 200 dpi, 200 x 100 dpi, 150 x 150 dpi, 100 x 100 dpi, and 72 x 72 dpi
<b>Network Protocols</b>	SMTP (Send) and POP3 (Receive)
<b>Compliance</b>	ITU-T T.37 Compliant
<b>Features</b>	Signature (SA configurable – 6 lines each of 128 character max) Delivery Confirmation: <ul style="list-style-type: none"> <li>• Email receipt option</li> <li>• Confirmation reply option</li> </ul> Cover sheet option Subject (248 characters) User configurable message body

Network Fax Server Features	
<b>Compatibility</b>	<ul style="list-style-type: none"> <li>• ITY (CCITT) group 3</li> <li>• Various Xerox Business Innovation Partner Solutions</li> </ul>
<b>Capability</b>	Provides walk-up faxing and hard copy output of received faxes when integrated with fax server applications (Fax server and software must be purchased separately from supplier). Transmission speeds, number of lines, compatibility, and compression are dependent on fax server configuration.
<b>Maximum Scan Size</b>	11 x 17 in. (A3/297 x 420 mm)
<b>Fax Send Features</b>	<ul style="list-style-type: none"> <li>• One- or two-sided scanning (up to 11 x 17 in. – A3/297 x 420 mm)</li> <li>• Phone number entry</li> <li>• Add to send list</li> <li>• Delay send (specific time)</li> <li>• Image quality selection (photo and text, photo, text, lighten/darken, five levels of sharpness)</li> <li>• Build Job</li> <li>• Speed Dials</li> </ul>
<b>Fax Print Features</b>	<ul style="list-style-type: none"> <li>• One- or two-sided printing</li> <li>• Staple on/off</li> <li>• Secure print on/off</li> </ul>

Optional Walk up Fax Features	
<b>Compatibility</b>	ITU (CCITT) Group 3
<b>Speed/Modems</b>	1 or 2 V.34 modems: 33,600 bps. Less than 4 seconds per page transmission time. (ITU Doc 1 standard resolution)
<b>Compression/Speed</b>	MH/G3, MMR/G4
<b>Fax Send Features</b>	Quality/Resolution: Original type: photo, photo/text, text only and Fax – off platen, mixed sizes or bound/book, Audio line monitor, Transmission options, Reduce/Split large documents, Cover letter, Delayed send, Build job, Polling, LAN Fax and Speed dials
<b>Fax Receive Features</b>	One- or two-sided printing, Stapled or unstapled, hole punch, Receive print mode – Manual (size, margin, stock)/Auto, Auto answer delay, Secure receive, Junk fax prevention, and Fax forward to email or SMB location
<b>Fax Reports</b>	Activity, Dial directory, Group directory, Options, Pending jobs, Broadcast report, and Transmission confirmation
<b>Fax Mailboxes</b>	Up to 100 password-protected mailboxes (one-line option) Up to 200 password-protected mailboxes (two-line option)
<b>Auto Dialing Features</b>	<p><b>Speed Dials:</b></p> <ul style="list-style-type: none"> <li>• 200 (one-line option)</li> <li>• 1,000 (two-line option)</li> </ul> <p><b>Group Dials:</b></p> <p><b>One-line Option:</b></p> <ul style="list-style-type: none"> <li>• Up to 100 groups</li> <li>• Up to 200 recipients per group</li> <li>• Up to recipient entries: 200</li> </ul> <p><b>Two-line option:</b></p> <ul style="list-style-type: none"> <li>• Up to 200 groups</li> <li>• Up to 400 recipients per group</li> <li>• Up to 1000 recipient entries</li> </ul> <p><b>Auto Redial:</b></p> <ul style="list-style-type: none"> <li>• Up to 14 attempts</li> <li>• 1 to 25 minute intervals</li> <li>• Batch send (up to memory capacity)</li> </ul>
<b>Resolutions</b>	Send: 200 x 100 dpi (Standard) 200 x 200 dpi (Fine) 600 x 600 dpi (Superfine) Receive: 200 x 100 dpi (Standard) 200 x 200 dpi (Fine) 300 x 300 dpi (Superfine) 400 x 400 dpi (Superfine) 600 x 600 dpi (Superfine)

## WHAT BERTL LIKED

- The Super G3 Fax Module expands the unit into a powerful workgroup fax.
- Internet fax function lets users transmit documents right from their desktop for added ease and productivity.
- Advanced features include: One- or two-sided printing, Staple on/off, Secure print on/off, and optional Walk-up fax.

## WHAT WE WOULD LIKE TO SEE

- BERTL was very satisfied with the ColorQube 9303's fax capabilities, features, and functions.

## IMAGE QUALITY

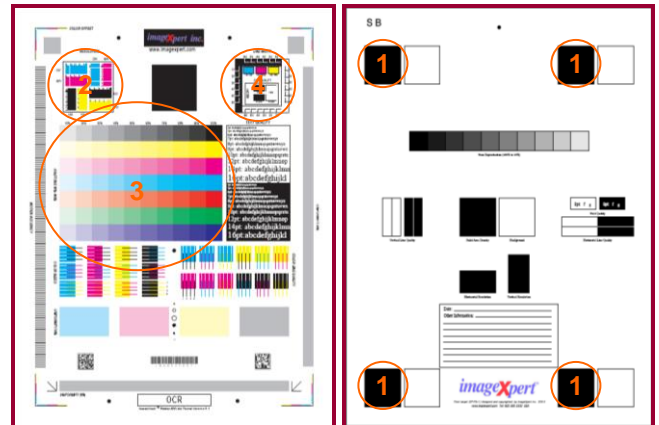
BERTL evaluates the output of several “test targets” in order to determine image quality. Following are descriptions of key elements of image quality. Note the numbered examples on each of the test targets shown in the right column.

### Office Color Image Quality

- Density of Solid Areas** - Better contrast; more vivid overall images
- Line Work** - Better production of lines and text
- Halftones** - Better production of photographic and screened images
- Negative/Positive** - Better production of fine detail

### Photographic Color Image Quality

- Flesh tones** - Better production of portraits
- Banding** - Better solid and dithered fill
- Low Contrast** - Better production of dark images
- Saturation** - Better production of bright colors
- Caste** – Better color fidelity
- Fine Detail** – Better reproduction of fine details



BERTL uses ImageXpert printer test targets for the evaluation of printed image quality. BERTL technicians' measure image density and evaluate the device's ability to produce a full range of halftones and various sizes of negative/positive text, dots and lines in each primary printing color (CYMK).

Density of Solid Areas*		
	Copy Density	Print Density
Black	1.17	1.62
Cyan	1.35	1.29
Magenta	0.85	0.88
Yellow	1.36	1.17

\*Density is on a scale of 0 to 2.5, with 2.5 being the best possible.

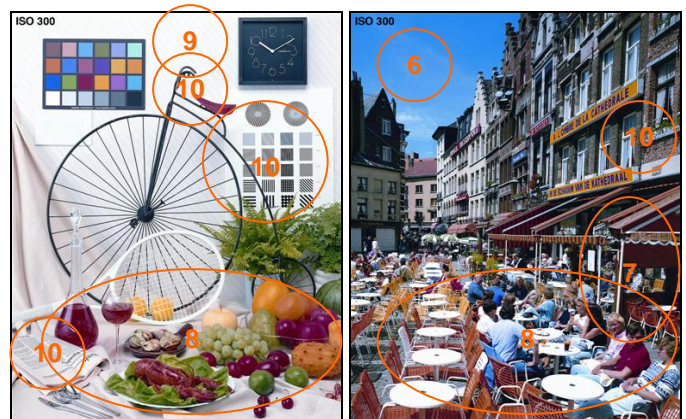
Copy & Print Resolution*				
	Copy Resolution		Print Resolution	
	Vertical	Horizontal	Vertical	Horizontal
Black	3.0	3.0	2.0	2.0
Cyan	3.0	3.0	2.0	2.0
Magenta	3.0	3.0	2.0	2.0
Yellow	3.0	3.0	3.0	3.0

\*Line Pairs per Millimeter. For copy and print resolution, lower is better (range, 1.0-5.0).

Print Halftones		
	Min. Gradation*	Max. Gradation**
Black	10	100
Cyan	10	100
Magenta	10	100
Yellow	10	100

\*Minimum gradation is on a scale of 10 – 100 percent in 10 percent increments. The best possible minimum gradation is 10 percent.

\*\*Maximum gradation is on a scale of 10 – 100 percent in 10 percent increments. The best possible maximum gradation is 100 percent.



BERTL uses synthetic (photographic) test images obtained from ISO International Standard 12640--Graphic Technology--Prepress digital data exchange--CYMK Standard Color Image Data (CYMK/SCID) in order to evaluate the ability to print photographic images.

## IMAGE QUALITY

Copy Halftones		
	Min. Gradation*	Max. Gradation**
Black	10	100
Cyan	10	100
Magenta	10	100
Yellow	10	100

\*Minimum gradation is on a scale of 10 – 100 percent in 10 percent increments. The best possible minimum gradation is 10 percent.

\*\*Maximum gradation is on a scale of 10 – 100 percent in 10 percent increments. The best possible maximum gradation is 100 percent.

Negative/Positive Lines*				
Line Width (points)	Negative		Positive	
	Vertical	Horizontal	Vertical	Horizontal
1	√	√	√	√
2	√	√	√	√
3	√	√	√	√
4	√	√	√	√
5	√	√	√	√
6	√	√	√	√

A "√" mark indicates the device was able to print the line width correctly.

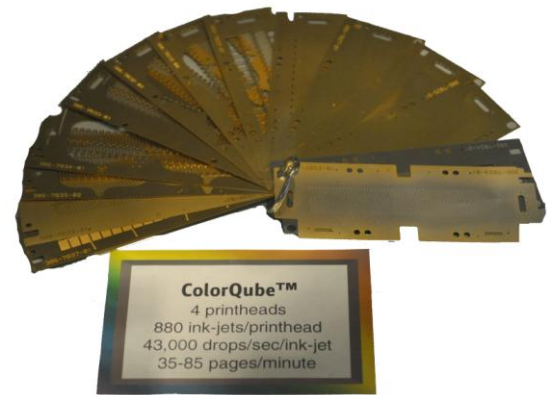
\*Chart cells containing an "x" indicate that the printer was not able to print the line width correctly. Overall, the fewer "x's," the better the image quality. If no cells are marked with an "x," then the device was able to print all line widths correctly.

Negative/Positive Dots*	
Line Width (points)	% of Dots Printed
1 pixel Black	100
1 pixel Black Neg	100
1 pixel Cyan	100
1 pixel Magenta	100
1 pixel Yellow	100
2x2 pixel Black	100
2x2 pixel Black Neg	100
Checkerboard apparent?	No

\*On a scale of 0 – 100%. The higher the percentage, the better.

Photo Quality	
	Ranking*
Fleshtones	4.5
Banding	5.0
Low Contrast	4.5
Saturation	4.0
Caste	4.5
Fine Detail	4.0

\*Based on a scale of 1 – 5, with 5 being the best.



*Xerox solid ink technology utilizes four printheads to achieve fast print speeds and ensure that the entire page is imaged at a constant rate displaying vibrant color quality.*



## XEROX HYBRID COLOR PLAN

The ColorQube 9303 offers a variety of Hybrid Color Plans to make the price of color affordable for offices everywhere. Most metered plans charge the same price for a small amount of color on a page as they do for full color. ColorQube 9303 pricing plans completely change this pricing paradigm by only charging users for the actual color they print. Now offices can utilize low cost color printing for documents with low-color coverage.

One example of a flexible pricing plan is the three-tier pricing plan which divides prints into three categories:



### Useful Color

Black-only pages and pages with low color coverage (such as typical emails, memos, and Microsoft Word documents). Billed at the Black + Color Level 1 meter rate and includes up to 286,000 color pixels (~1.2% color area coverage on a letter/A4 size page).



### Everyday Color

Pages with moderate color coverage (such as typical flyers and Microsoft Excel and PowerPoint documents). Billed at the Color Level 2 meter rate and includes pages with 286,001 – 1,400,000 color pixels.



### Expressive Color

Pages with high color coverage (such as typical photos, brochures, newsletters, and marketing materials). Billed at the Color Level 3 meter and includes prints with over 1,400,000 color pixels (~6% color area coverage on a letter/A4 size page).

## ColorQube™ Series Cost Savings Calculator



The ColorQube series lowers the price of color prints, making it more affordable to print color everyday. Tell us what you pay today and compare your current per-page prices with one of the ColorQube flexible pricing plans. Find out how much you could save printing color everyday.

Step 1 of 2: Tell us a bit about your current monthly usage:

Average monthly print volume:

Percentage of your print volume that is in color:

Price you currently pay for each color page:

Price you currently pay for each black & white (B&W) page:

next

Users can calculate their cost per page using Xerox's ColorQube Cost Savings Calculator to get price estimates depending on their typical print output.

## ColorQube™ Series Cost Savings Calculator

The ColorQube series' unique pricing plans only charge you for the actual color you print. Color pricing is broken down into 3 tiers (Useful Color, Everyday Color, and Expressive Color) based on the color coverage of each printed page. To see what tier your documents fall into, use the Document Analyzer.

You print 7500 color pages per month

Step 2 of 2: Enter the % of each type of color document you print.

Useful Color ?    Everyday Color ?    Expressive Color ?

30 %    40 %    30 %

back    calculate results

Users can enter a percentage estimate for each of the color documents that are mostly generated in their office.

## ColorQube™ Series Cost Savings Calculator

Potential savings:  
**55% or \$458 /month**  
 compared to your current plan.

Want to learn more?  
 Call a sales advisor  
 1-800-275-9376 ext.587  
 > print results  
 > find a sales location  
 > get a quote  
 > live chat

Detailed Summary

Your current plan:  
 7500 pages/month B&W x 1¢ = \$75.00  
 7500 pages/month any color x 10¢ = \$750.00  
 Total Printing Cost: \$ 825.00 /month

ColorQube Series plan:  
 9750 pages B&W + Useful Color x 1¢ = \$97.50  
 3000 pages Everyday Color x 3¢ = \$90.00  
 2250 pages Expressive Color x 8¢ = \$180.00  
 Total Printing Cost: \$ 367.00 /month

> see price disclaimer

back

Based on the information entered into the calculator, users are provided with a cost savings estimate.

## WHAT BERTL LIKED

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- PANTONE approved color simulations deliver accurate color on every print.
- With Xerox's Color by Words tool, there is no need to go back to square one and manipulate source files. Users can change the color of one object or area without affecting the rest of the page.
- Very Good print and copy density in all four colors.
- Excellent resolution in both copy and printer modes.
- Great halftone reproduction in printer mode when printing all four colors (black, cyan, yellow, and magenta), as the device was able to correctly produce virtually all halftone shades in BERTL's halftone-evaluation chart.
- The device displayed good line control and excellent dot control.
- Tints and registration was above-average.
- Four dpi resolution settings which include: High Resolution/ Photo at 600 x 600 dpi, Enhanced at 450 x 567 dpi, Standard at 300 x 500 dpi and Fast Color at 225 x 450 dpi.
- Xerox solid ink technology utilizes four printheads that cover the full width of a 12" x 18" page displaying vibrant color quality.
- Gradations were smooth in all colors and grayscale shades.
- No saturation was noticed in any of BERTL's test files.
- Excellent production of business charts and graphs.
- High-Quality 600 x 600 dpi printing provides clear, crisp images, even on jobs with fine details.
- BERTL test files containing full bleed solid colors printed evenly and consistently with no visible banding across the page.
- BERTL photographic test files displayed realistic fleshtones with a smooth and matte finish.
- Xerox's Hybrid Color Plan lowers the cost of printing and copying color pages by allowing users to choose from a unique metered bill plan based on the amount of color printing on the page. Overall, these plans save money for the customer.

## WHAT BERTL WOULD LIKE TO SEE

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- BERTL was very satisfied with the ColorQube 9303's image quality.

## PROGRAMMING THE CONTROL PANEL

A control panel's ease of use—or lack of—can often have a significant effect on user productivity. The harder it is to select frequently used options such as duplexing, document finishing, etc., the more time the user has to spend programming the device and the less productive they are. Xerox's ColorQube 9303's control panel has a large 8" color touch screen and hard keys. BERTL was extremely impressed with the on-screen help videos that displayed step-by-step instructions for device management and error recovery. Also contributing to the productivity of the ColorQube 9303 is the ability to Scan to and Print from a standard USB memory device instantly allowing a more portable way to access files.

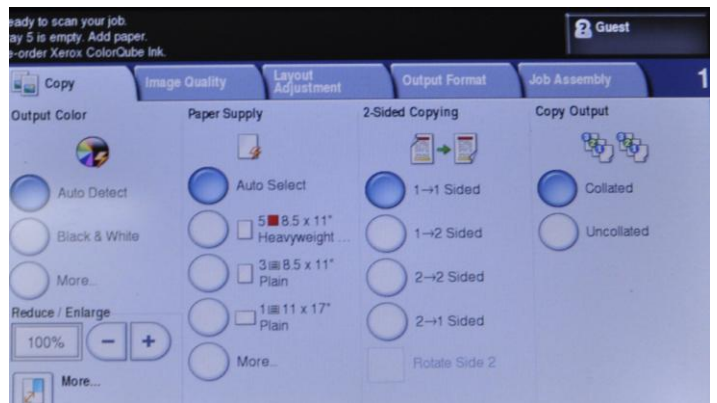


In the chart below, BERTL assesses how many steps are required to make these commonplace settings.

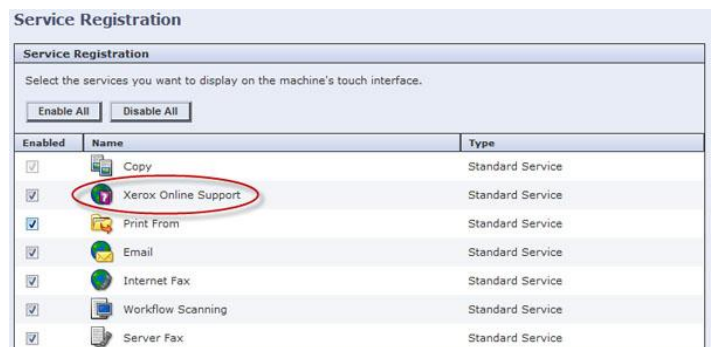
Selections Required for Frequently Used Copy Functions	
Photo Mode	5
Corner Staple	2
Reduce to 64%/78%	3
1:2	2
2:2	2
Copied Front and Rear Covers	5
Scan to USB	3
Print from USB	3



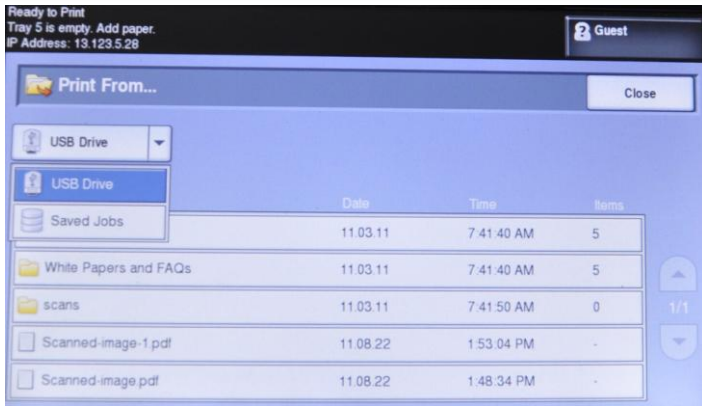
The touch screen's main menu provides users with the following functions: Copy, Xerox Online Support, Print From, Email, Internet Fax, Workflow Scanning, and Server Fax.



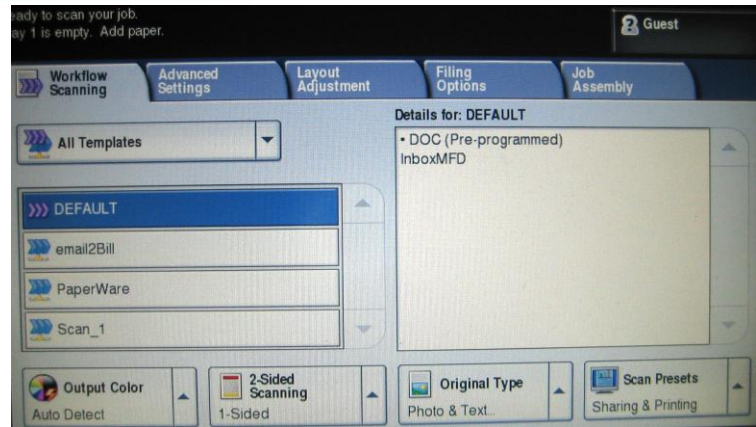
The Copy touch screen's main menu displays the most common copying choices. The blue highlighted buttons on the touch screen display currently selected settings.



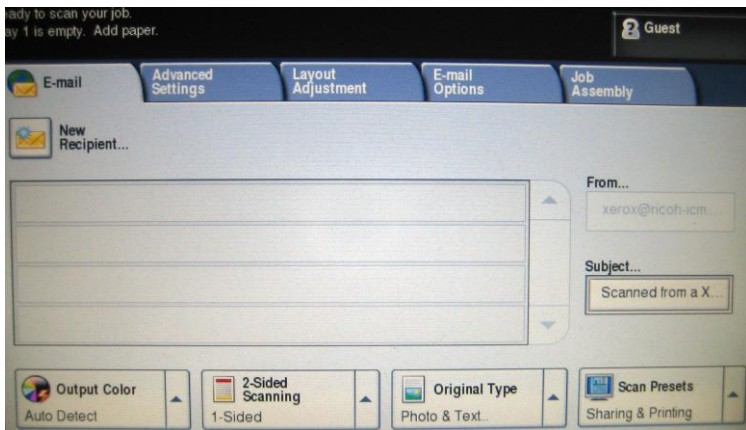
The Online Support screen displays intuitive help guides on the control panel for all functions. BERTL analysts found these guides to be extremely helpful.



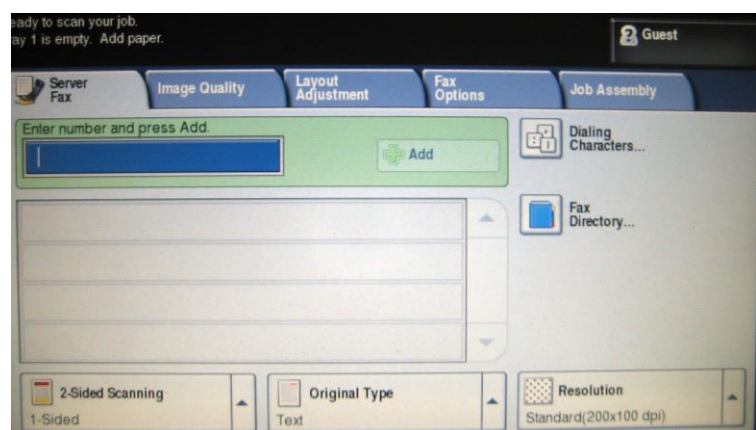
The Print From screen enables users to print files (PDF, XPS, JPEG, and TIFF) directly from a Type A USB port which is located on the left side of device.



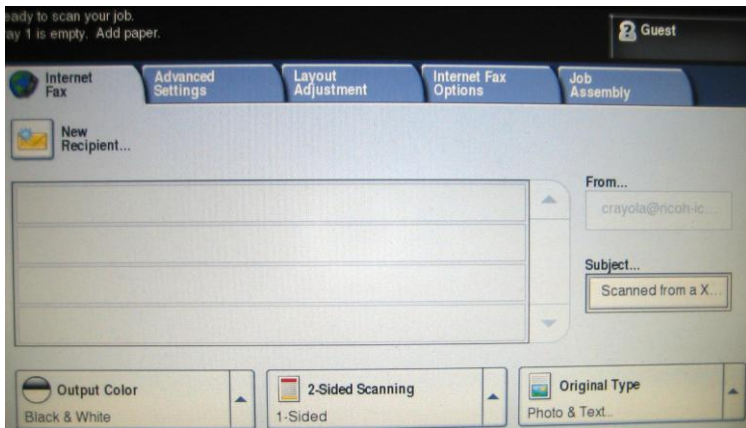
Users have many scanning options and features which include scan to applications, web folders, URLs, USB and mailboxes.



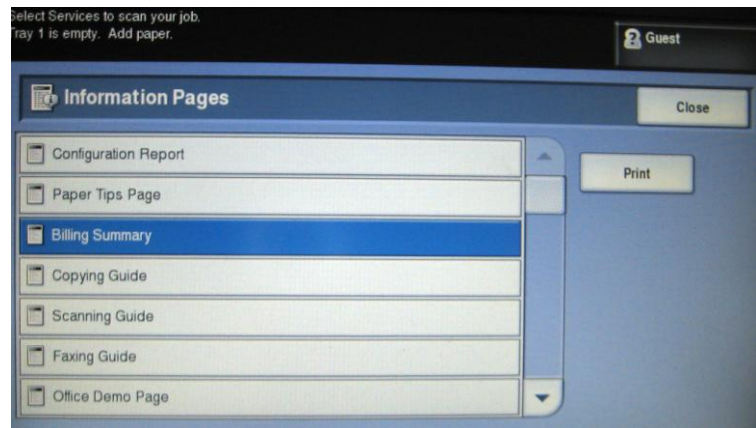
Scan to Email allows users to route files to email recipients directly from the control panel.



Users can send faxes from the desktop, over the Internet or via an existing fax server.



Internet Fax allows users to send out faxes via a network connection rather than using a telephone line.



The Machine Status screen enables users to print configuration pages and guides. Users can also print billing summary sheets as well as check consumables status.

## PCL6 AND POSTSCRIPT DRIVERS

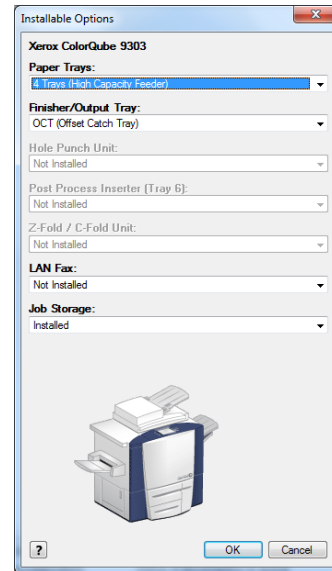
As with control panels and touch screens, print driver design can vary enormously from manufacturer-to-manufacturer. Xerox has made it a simple process with their design of the PostScript and PCL drivers. The drivers are the same as other Xerox device drivers, making them especially easy for Xerox users to quickly acclimate to them. The ColorQube 9303 also supports the Xerox Global Print Driver and Xerox Mobile Express Driver which can simplify installing, managing and supporting printers and MFPs on the network and increasing end-user productivity.

Print Driver Checklist	
Do print drivers have identical user interfaces?	Yes
Are print drivers interfaces identical to other vendor models?	Yes
Bi-directional communication within print drivers?	Yes
Auto device configuration from within print driver?	Yes
Does print-driver installation require rebooting of the workstation?	No
Are print-driver deployment processes included?	Yes
Are print driver deployment guidelines and procedures included?	Yes

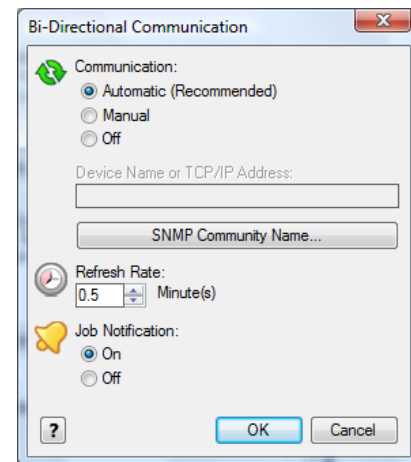
Xerox ColorQube 9303 print drivers offer different Print Quality settings which changes the print speeds and the image quality. Below is a chart displaying the different color mode settings found in each of the drivers tested.

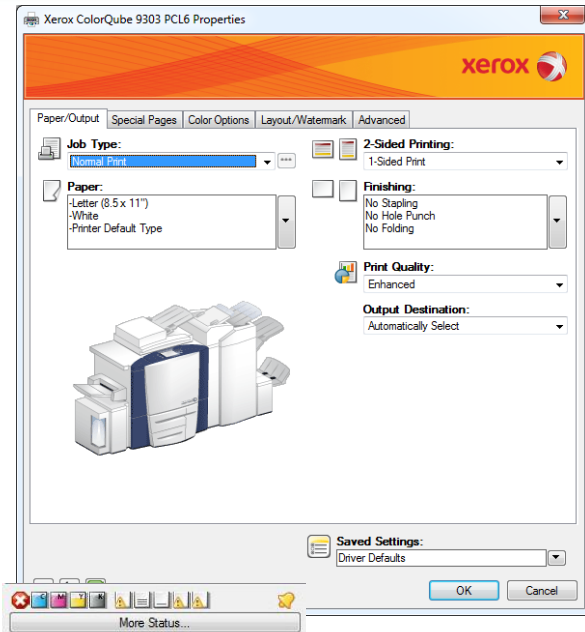
Black-and-White		
Mode	PostScript Driver	PCL6 Driver
High Resolution/Photo (38 ppm)	√	√
High Speed (60 ppm)		√
Standard (70 ppm)	√	√
Fast Color (85 ppm)	√	√
Color		
High Resolution/Photo (38 ppm)	√	√
Enhanced (55 ppm)	√	√
Standard (70 ppm)	√	
Fast Color (85 ppm)	√	√

## PRINT DRIVER DIALOGUE SCREENS

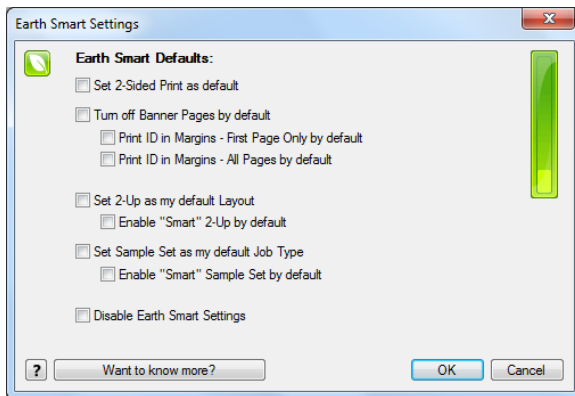


**Above and below:** In order to specify which options have been installed, as well as specify system defaults, administrators first access the “Devices and Printers” folder via the Microsoft Windows’ Start menu, and then select either the ColorQube 9303’s PCL6 or PostScript driver. Administrators can “manually” specify which options are installed, or they may simply enable “Bi-Directional Communication” between the device, and the driver automatically indicates that the options shown above are available for use.





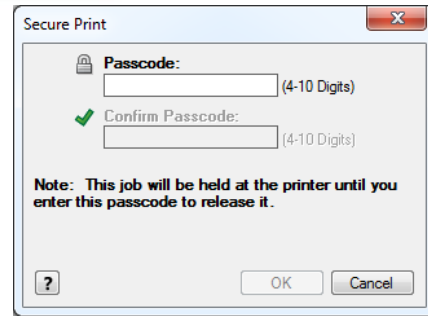
The print driver dialogue screen for both the PCL6 and PostScript drivers are virtually the same with some minor differences. The first tab on both the PCL6 and PostScript driver is the Page/Output. This tab provides basic options such as job type, paper options, 2-sided printing, finishing, print quality, and output destination. Users can always view the device consumable levels and check the status of the device by selecting the "More Status" bottom located on the lower left side.



The Earth Smart Settings button located on the bottom left corner enables users to select Earth Smart features such as Set 2-Sided Print as default, or Turn off Banner Pages.

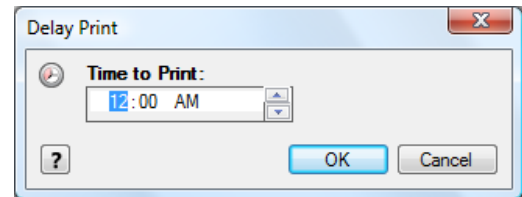
In the "Job Type" drop-down menu to the left are options for Normal Print, Secure Print, Sample Set, Delay Print, Store File in Folder and Fax.

**Normal Print:** Prints the job immediately without requiring a pass code.

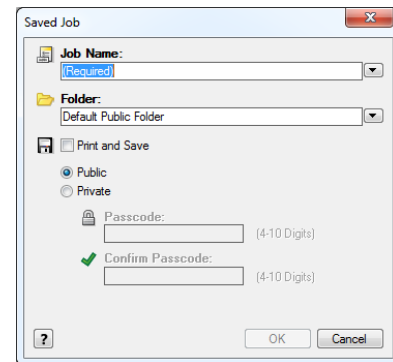


**Secure Print:** Prints the job only after the user enters their pass code at the printer's control panel.

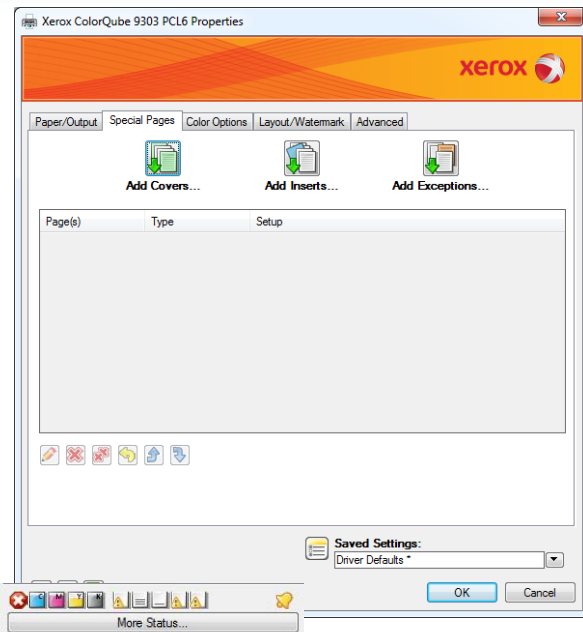
**Sample Set:** Prints one copy of the job as a sample and holds the remaining copies of the job at the printer until you release them from the printer's control panel.



**Delay Print:** Prints the job at the time specified by the user. When this job type is selected, the Delay Print dialog box appears so users can specify a time to print.

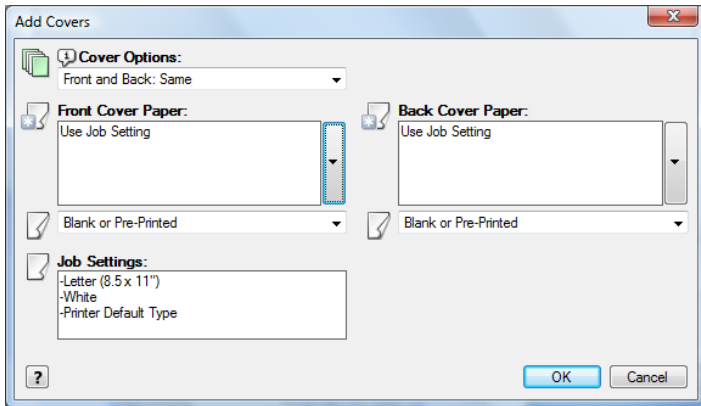


**Saved Job:** This feature stores the job on the printer's hard drive. Users can then print the job on demand from the printer's control panel or from CentreWare Internet Services. When this job type is selected, the Store File in Folder dialog box appears so users can assign a job name, folder name and, if desired, enable secure saved job by providing a passcode with up to 20 digits.

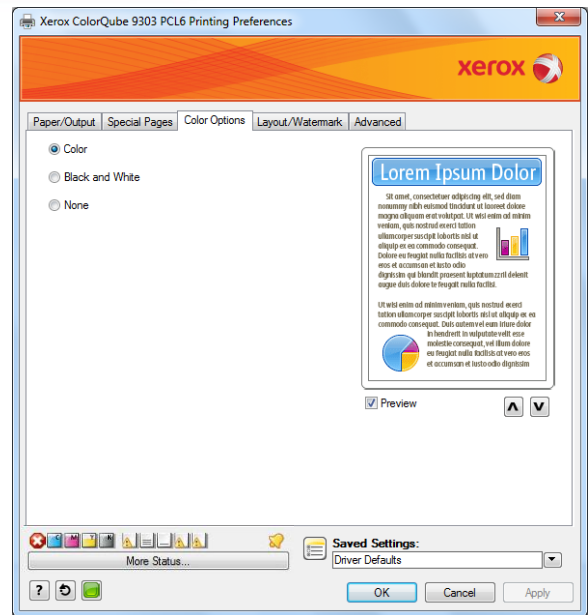


The Special Pages tab enables users to add, modify, or delete cover pages, inserts, or add exception pages.

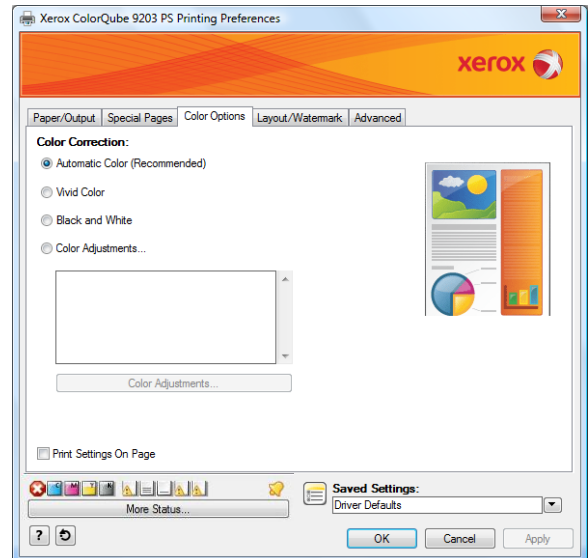
The center table in the dialogue screen provides a summary of the special pages set for the print job. Up to 250 inserts and up to 250 exception pages can be included in the table.

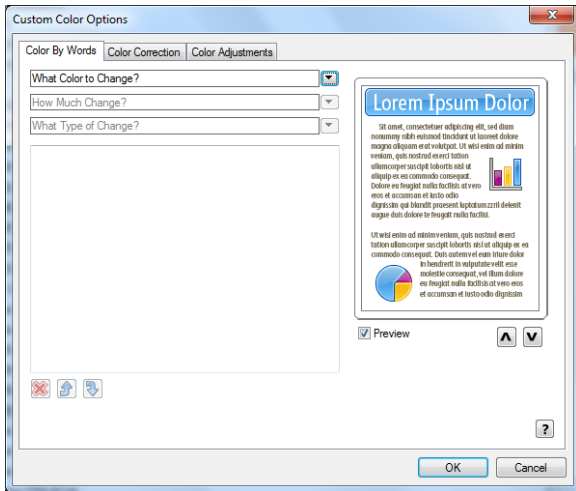


Users can create their own front and back cover sheets and select the type of paper they are printed on.

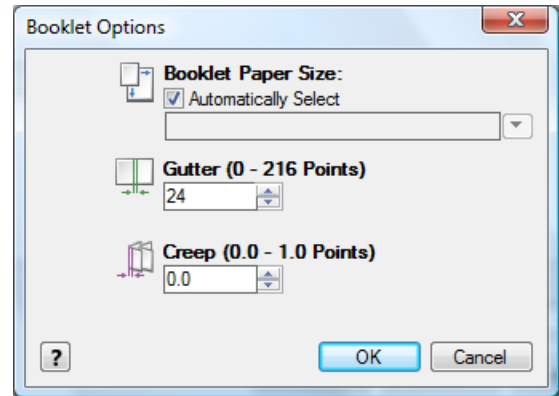


**Above and below:** The Color Options tab allows users to choose color correction. The PostScript driver has the added features of Automatic Color and Color Adjustments which give users the ability to adjust the color in their print job. This feature provides users with color matching options used to match the printer's colors as closely as possible to those of a computer screen or a printing press, or converting the colors to grayscales.

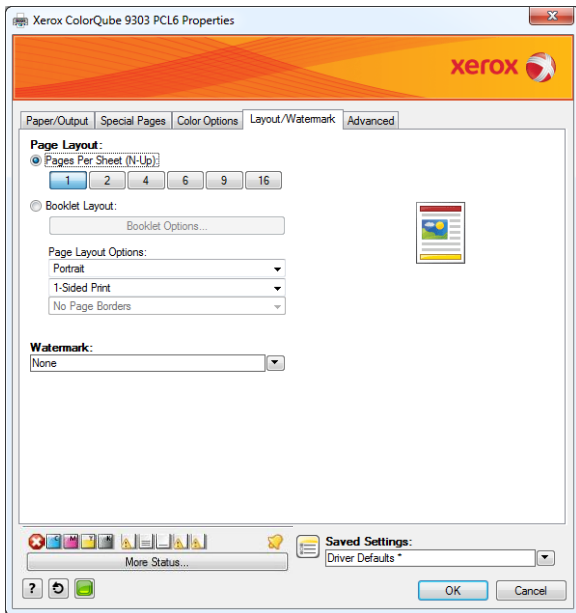




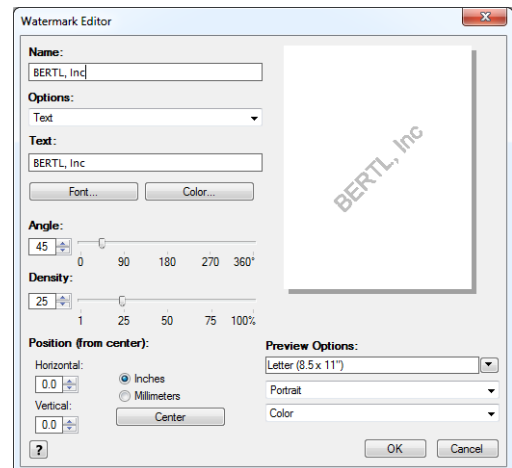
The PostScript driver also incorporates Xerox's unique Color by Words tool which provides intuitive color enhancements. Users can change the color of one object or area in a printout without affecting the rest of the page.



With the Booklet Options, users can change paper sizes and are given the option of adjusting both the Gutter and Creep.

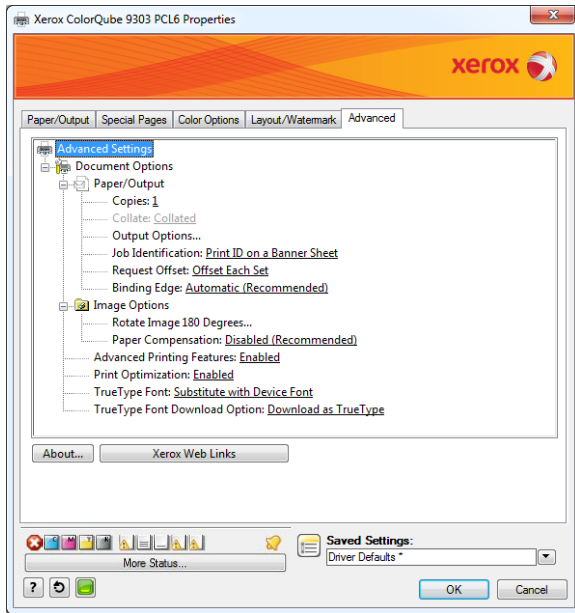


The Layout/Watermark tab contains some added options that insert effects to the print jobs such as Page Layout (N-up), Booklet Layout, and Watermarks.



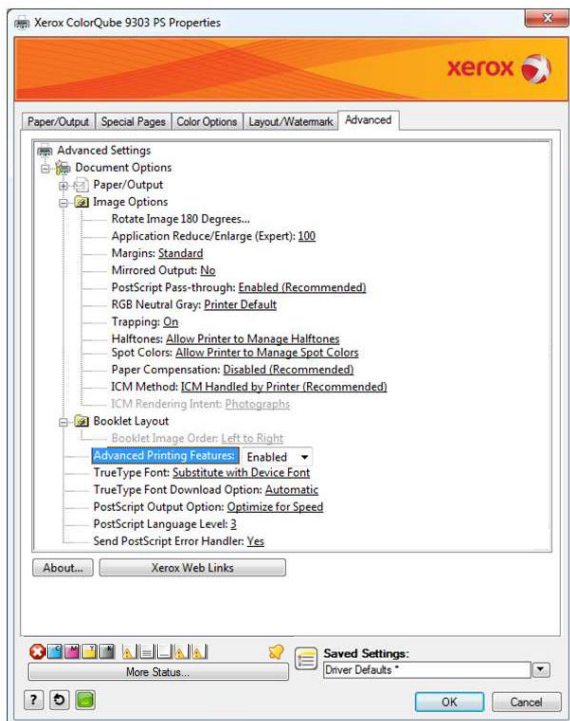
Within the Watermark Editor screen users can create their own watermarks, as well as position them and enlarge them.





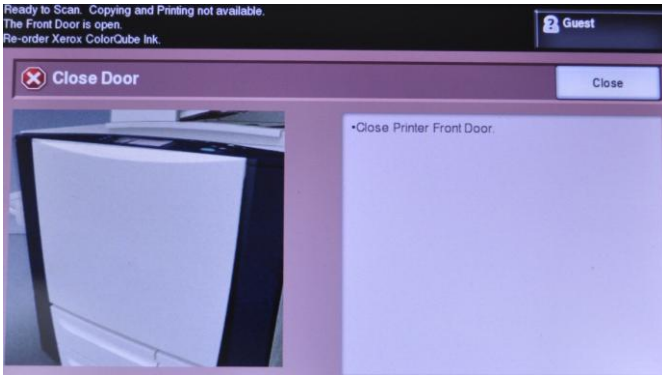
The About button provides the print driver version information.

**Above and below:** The Advanced options tab provides users with the ability to select advanced printing options that are rarely changed. The PostScript driver has the added booklet layout feature.



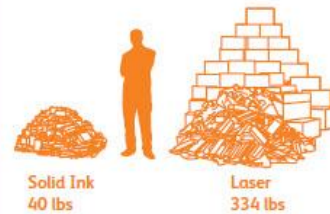
## ROUTINE MAINTENANCE

The Xerox ColorQube 9303 displays animated, step-by-step instructions for routine tasks such as clearing paper misfeeds or replacing ink. BERTL found these animated screens very helpful when performing these routine maintenance tasks.



### Solid Ink waste vs. laser waste

Cartridge-free Solid Ink is a true consumable; no empty toner cartridges to dispose or recycle. The ColorQube® 9300 series produces 90 percent less waste during use than a comparable laser device.



Total waste produced from printing 12,500 pages per month for 4 years.

Maintenance Checklist	
Load ink while running?	Yes
Requires rear access for maintenance items?	No
Requires side access for access to maintenance items?	No
All-in-one imaging units?	N/A
User-disposable waste item(s)?	Yes



**Above and next column:** Since 1991 Xerox has been designing solid ink sticks. These ink sticks are easy to use, cartridge free and are environmentally responsible and produce great color. Solid Ink sticks avoid the cartridge and the packaging, creating up to 90% less waste versus comparable laser devices. Xerox Solid Ink has been certified by the National Association of Printing Ink Manufacturers (NAPIM) to have 30% bio-derived renewable material content.. Solid Ink stick packaging is made from post consumer waste and can be recycled. Compared to the multiple imaging units required throughout the life of a typical xerographic device, the ColorQube 9303 has only one customer replaceable component, a long life Cleaning Unit with an average yield of 330,000 prints.

## REPLACING SOLID INK STICKS



**Above and next page:** BERTL analysts found replacing the ColorQube 9303's solid ink sticks to be extremely easy. The user must first lift up the top panel of the left side of the device, and then simply drop in the stick. As many as six sticks can be loaded at a time. Users can also drop the sticks in while the device is printing for uninterrupted jobs.



## CHANGING THE SOILD INK WASTE CONTAINER



**Above and next column:** Users must periodically empty the device's ink waste container. The container is accessible by opening the front panel door and sliding it out. Xerox has done a great job of labeling all the device's consumables for easy access.

## REPLACING CLEANING UNIT



Users can also replace the device's cleaning unit by opening the front panel door and sliding the unit out.

## MISFEED ACCESS

If a misfeed occurs on the ColorQube 9303, its location is indicated on the touch screen, which displays the misfeed-access area.



In order to access any misfeeds that may occur in the duplex automatic document feeder, the user lifts up this cover.



To access the front misfeed areas, the user first opens the front door. Once open, the user can use the green dials and levers to clear any misfeeds. There are LED sensor lights to help guide users during this process.



**Above and below:** The left side misfeed access areas are located by opening these panel doors and clearing any misfeeds.



## CLIENT UTILITIES AND DEVICE MANAGEMENT

In order to take the best and most efficient advantage of a device and its capabilities, as well as ensure maximum uptime, clients need an efficient way to access and monitor the device. Xerox offers many features and options to help productivity for all users.

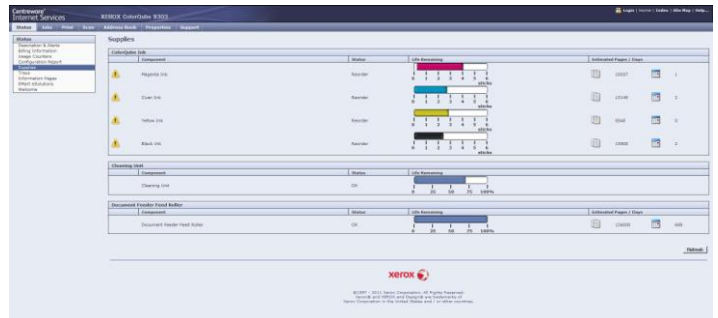
CentreWare® Internet Services – Integrated Device Web Page	
<b>Xerox CentreWare Web</b>	<p>A Web-based server application for network administrators that permits Web browser-based device management from any workstation, whether running Windows or UNIX or any other operating system</p> <ul style="list-style-type: none"> <li>• Works with any SNMP-managed printer from any manufacturer</li> <li>• Provides help with device discovery and installations, health checks and troubleshooting, and device upgrades, as well as basic accounting and asset management</li> </ul>
<b>Device Status</b>	<p>Web server embedded in Smart Controller:</p> <ul style="list-style-type: none"> <li>• Tray status/contents</li> <li>• Consumables status</li> <li>• Alerts</li> </ul>
<b>Scan Template Management</b>	<ul style="list-style-type: none"> <li>• Support 250 scan templates</li> <li>• Create device specific CentreWare scan templates</li> <li>• Select confirmation sheet options</li> <li>• Share scan templates via device cloning</li> </ul>
<b>Job Submission</b>	<ul style="list-style-type: none"> <li>• Print ready files: PS, PCL, TIFF, PDF, JPG and XPS</li> <li>• Output feature selection (2-sided, output color, collate, orientation, staple, hole-punch, folding, output destination)</li> <li>• Delivery options (Immediate, sample set, proof, delay and secure, Save job or reprint)</li> </ul>
<b>Device Administration</b>	<p>Allows simple, remote installation setting of configuration options and management of the device</p>



*Xerox provides several solutions for monitoring the device and jobs. Among them is CentreWare Internet Services, a web-based solution that enables clients to view device status and configuration, and enables administrators to manage and configure system and network settings.*



*With CentreWare Internet Services, clients can view current device status and installed paper sizes, types, and status levels.*



*From CentreWare Internet Services, users can check the status of the following consumables: ink levels, cleaning unit, and document rollers.*



Users have the ability to log on to the CentreWare Internet Services and submit a print job directly from the web interface.



Smart eSolutions provide administrators with secure automatic meter reads and supply replenishment information. Administrators have the option of accessing this information directly from the device or via the web client interface.



Send



Confirm



Print

Xerox Mobile Print Solution enables users to send print jobs from any email-enabled device (ie. smartphones or tablets). Users simply email a document, then confirm and print at the device by entering a confirmation number. Users can print many file types including MS Office documents and PDFs.

Device Management Options	
<b>Software Installation and Upgrade</b>	Device Installation Wizard Network Controller Install Wizard Software Upgrade via Network
<b>Management Support</b>	SNMP Version 1, SNMP Version 2c and SNMP Version 3 trap over TCP/IP and IP, MIB access (IETF-MIBII RFC 1213) Host Resources, MIB RFC 2790, Printer MIB RFC 1759 v.2
<b>Xerox CentreWare for Unicenter TNG</b>	Provides added identification to the general discovery performed by Unicenter TNG and the ability to see the ColorQube under a Unicenter TNG Business Process View
<b>Xerox CentreWare for Tivoli Netware</b>	Provides for the identification of Xerox ColorQube®, WorkCentre® and Phaser® printers and multifunction printers in the general discovery performed by Tivoli NetView
<b>Xerox CentreWare for HP OpenView</b>	<ul style="list-style-type: none"> <li>Provides for the identification of Xerox ColorQube®, WorkCentre® and Phaser® printers and multifunction printers in the general discovery performed by HP OpenView</li> <li>Provides traps and message updates to the OpenView alarm browser and the ability to launch CentreWare Internet Services for device management directly from OpenView</li> </ul>
<b>Xerox Device Manager</b>	<p>Xerox Device Manager collects and manages the data that drives fact-based decisions for your enterprise device management environment. It is a single tool to install print queues and configure, manage, monitor and report on both networked and locally connected devices – regardless of vendor – across your enterprise. Xerox Device Manager provides:</p> <ul style="list-style-type: none"> <li>Device monitoring and troubleshooting</li> <li>Extensive reporting and discovery of new devices</li> <li>Usage collection, chargeback and billing capabilities</li> </ul>

Device Management Options	
<b>Xerox Barcode Pro PS (optional)</b>	Enables intelligent PostScript printing on Xerox multifunction printers by storing Xerox software, as well as the barcode fonts on the printer hard disk. Enables the printing of barcodes from any application (SAP R/3 client or mainframe) that supports PostScript printing. Automatically calculates the check digit, places start/stop and middle bar characters in the data string, compresses, encodes and rotates the barcode through 90 or 270 degrees
<b>Xerox Device Types for SAP R/3 Environment</b>	<p>Simplifies printing in SAP R/3 environments by providing users of SAP R/3 3.x, 4.x, 4.5x, 4.6x, SAP Enterprise 4.7x, ERP applications with enhanced ColorQube printing functionality (PostScript and PCL):</p> <ul style="list-style-type: none"> <li>• One- to two-sided printing</li> <li>• Finishing provides single or dual stapling</li> <li>• Tray pull location from any tray</li> <li>• Number of copies – provides the ability to print multiple copies</li> <li>• Paper Type and color – provides ability to select paper types and colors, such as transparency, red, etc.</li> <li>• Print security via PIN ID capability</li> <li>• Job Based Accounting (JBA) – Provides capability to add JBA UserIDs to SAP print jobs</li> <li>• Printer banner sheet – Provides the ability to enable/disable printer banner sheets</li> <li>• Barcode printing – Xerox standard PostScript device types available at <a href="http://www.xeroxofficesapsolutions.com">www.xeroxofficesapsolutions.com</a> supports Intelligent Barcode Printing with Xerox Barcode Pro PS. This Barcode Pro PS can be purchased at <a href="http://www.font.net">www.font.net</a></li> </ul>
<b>Xerox SAP R/3 Intelligent Barcode Utility (optional)</b>	Provides built-in intelligence that allows the printing of barcodes on any appropriately configured PostScript printer on the SAP R/3 4.1x, 4.5x, 4.6x and within Latin-1 (ISO8859-1) SAP system code pages only. Used in conjunction with Xerox PostScript Device Types for SAP R/3 environment and Xerox Font Center Barcode Fonts. Utility enables automated checksum calculation, placement of start/stop characters, encoding of data string and data compression

Automated Services Platform	
<b>Meter Assistant</b>	Automatically collects and securely submits your device meter reads to Xerox using a built-in audit process to increase billing accuracy
<b>Supplies Assistant</b>	Proactively manages ink stick supplies and monitors usage to ensure you have the right supplies at the right time
<b>Maintenance Assistant</b>	Offers a fast (and free) way to resolve potential issues and receive assistance and automate the troubleshooting/repair process. Diagnostic data is sent to Xerox, allowing for problems to be solved faster with increased uptime.

## **WHAT BERTL LIKED**

- The control panel's hard keys are large, well-organized, and clearly labeled, while the touch screen features large text for easy viewing, as well as a simple design for easy navigation. The touch screen is virtually the same as other Xerox ColorQube models, which will make it especially easy for ColorQube users to quickly acclimate to it.
- The Xerox EIP software platform found inside the ColorQube 9303 device enables personalized solutions that users can access right from the device touch screen.
- For network and device management, Xerox provides users with the CentreWare Web Software Suite. CentreWare Internet Services provide an easy-to-use Web-based interface, and can be used to view detailed system and consumables' status. It also enables administrators to manage and configure device and network settings. This web-based solution enables administrators to monitor and manage a fleet of devices from any workstation on the network.
- Network-management and configuration of the Xerox ColorQube 9303 can easily be handled via CentreWare Internet Services Network Setup Utility. Administrators can clone multiple devices with settings obtained from one device.
- CentreWare Internet Services provides automatic e-mail alerts when the system requires attention.
- Both PCL6 and PostScript drivers are relatively easy to use and logically organized. Both drivers have nearly the same exact user interface. This will enable users to quickly and easily switch between drivers and allow them to find the settings they need from one driver to another with ease.
- Both the PCL6 and PostScript drivers feature bi-directional communication, so that users can view device status directly within the print drivers.
- Different speed and image quality options within the printer drivers.
- Internet fax transmits faxes digitally via the internet with support for SMTP and POP3.
- Fax send and receive two-sided fax documents. Supports printing received faxes on 11" x 17" (A3) paper.
- Standard Network server fax enablement — allows faxes to be sent and received digitally over the network.
- User Permissions restricts printing to users based on color, time of day, job type, and application allowing administrators to control who is printing color vs. black and white.
- Animated videos on the control panel for step-by-step instructions to replace ink sticks and clearing misfeeds.

- With the ColorQube 9303 multifunction device, print and scan drivers can be deployed centrally, thereby eliminating the need for IT staff to perform desk-to-desk manual installation of the driver software.
- CentreWare Web wizards provides users with aid in the installation process, troubleshooting and upgrading print and scan drivers, while freeing up IT administrators.
- Xerox Mobile Print Solution allows mobile workers to print directly from their mobile devices and retrieve documents at a Xerox-enabled MFP with a secure confirmation code
- Offers a greener workplace with cartridge free Solid Ink sticks with less packaging than toner cartridges, reducing waste by 90%.
- Supports the following OS's: Microsoft® Windows® XP (32- and 64-bit), Windows Server 2003 (32- and 64-bit), Server 2008 (32- and 64-bit), Windows Vista (32- and 64-bit), Windows 7 (32- and 64-bit), Mac OS 10.5-10.6 (PostScript only), Solaris® 9, 10, HP UX® 11, 11i, AIX 5, Linux RedHat® Fedora Core 1-7, Linux RedHat Enterprise Linux 4, SUSE® 10.X, Unix (English PPD only), and Citrix.
- Standard security features include: Secure Print, Authentication with NDS/LDAP/Kerberos/SMB, Hard disk overwrite security, Password Protected PDF, 256 bit Hard Disk Encryption, FIPS 140-2 Encryption, IPsec, 802.1X, SNMMP v3.0, Common Criteria Certified. Optional security features include: Xerox Secure Access Unified ID System®, USB card reader, Common Access Card Enablement Kit.

## **WHAT BERTL WOULD LIKE TO SEE**

- BERTL found that the Xerox ColorQube 9303 was extremely easy to use and maintain on a daily basis.



## MEDIA INPUT

The ColorQube 9303 comes standard with two 550-sheet paper trays, a 2,100-sheet paper drawer, and a 100-sheet bypass tray. For high-volume printing, a High Capacity Feeder option increases the total capacity to 7,300 sheets. A wide range of paper sizes and weights are supported with the ability to print on stock as heavy as 80 lb cover (220 g/m<sup>2</sup>) and paper sizes up to 12.6" x 18".



*The ColorQube 9303 shown above comes standard with two 550-sheet paper trays, a 2,100-sheet paper drawer, and a 100-sheet bypass tray. An optional 4,000-sheet high capacity feeder brings a maximum paper capacity of 7,300 sheets.*

Media Handling Checklist	
Minimum/Maximum Media Weight	
Duplex Automatic Document Handler	13 lb bond to 43 lb bond (50 to 160 g/m <sup>2</sup> )
Three Front Loading Trays - Paper Trays 1, 2 and 3	16 lb bond to 57 lb bond/80 lb cover (60 to 220 g/m <sup>2</sup> )
Bypass Tray	16 lb bond to 80 lb cover (60 to 220 g/m <sup>2</sup> )
High Capacity Feeder	16 lb bond to 57 lb bond/80 lb cover (60 to 220 g/m <sup>2</sup> )
Offsetting Catch Tray	500 sheets of 20 lb bond (75 g/m <sup>2</sup> )
Office Finisher	16 lb to 57 lb bond/80 lb cover (60 to 220 g/m <sup>2</sup> )
High Volume Finisher	13 lb to 57 lb bond/80 lb cover (60 to 220 g/m <sup>2</sup> )
High Volume Finisher with Booklet Maker	16 lb to 57 lb bond/80 lb cover (60 to 220 g/m <sup>2</sup> )
Booklet Maker	16 lb to 57 lb bond/80 lb cover (60 to 220 g/m <sup>2</sup> )
Z-Fold/C-Fold Unit	16 lb to 32 lb bond (60 to 120 g/m <sup>2</sup> )
Post Process Inserter	16 lb to 57 lb bond/80 lb cover (60 to 220 g/m <sup>2</sup> )
Feeds maximum media weight from all sources?	Yes
Offset Stacker	No
Finisher	Yes
Hole Punch	Yes
Saddle Stitch	Yes

## LOADING MEDIA

Paper Loading Checklist	
Maximum media weight from all media sources?	Yes
Drop-in loading of a full ream of paper?	Yes
Corner separators in paper trays?	No
Spring-loaded ramps in paper trays?	No
Geared media size side guides?	No
Captured rear media guide?	No
Automatic paper size detection?	Yes



*The 100-sheet bypass tray can be adjusted by sliding these levers into place. The feeder can be adjusted for envelope printing.*



**Above and below:** In order to adjust the 550-sheet paper drawers to accommodate different paper sizes, the user squeezes and slides these green guides into place. BERTL found it easy to adjust all the paper drawers.




*The high capacity feeder can hold up to 4,000 letter size sheets for large uninterrupted print runs.*





**Above and next column:** In order to adjust the 2,100-sheet paper drawer, the user turns and lifts these green dials into place.

## MEDIA OUTPUT AND FINISHING

The Xerox ColorQube 9303 offers three high-performance finishers that allow users to choose between basic features such as stapling and hole punch, and advanced capabilities including saddle stitched booklets and C- and Z-folded brochures, all in which give documents a professional look and feel. Users can choose from the Office Finisher, High Volume Finisher, or the High Volume Finisher with Booklet Making.

 <h3>OFFICE FINISHER</h3>	
<b>Capacity</b>	Top Tray – 250 sheets Stacking Tray – 2,000 sheets
<b>Sizes</b>	5.5 x 8.5 in. (A5/148 x 210 mm) to 11 x 17 in. (A3/297 x 420 mm)
<b>Weights</b>	16 lb to 57 lb bond/80 lb cover (60 to 220 g/m <sup>2</sup> )
<b>Stapling</b>	50 sheets Single and dual
<b>Hole Punch (Optional)</b>	3-hole punch 2-hole Legal punch

 <h3>HIGH VOLUME FINISHER</h3>	
<b>Capacity</b>	Top Tray – 250 sheets Stacking Tray – 3,000 sheets
<b>Sizes</b>	5.5 x 8.5 in. (A5/148 x 210 mm) to 11 x 17 in. (A3/297 x 420 mm)
<b>Weights</b>	13 lb to 57 lb bond/80 lb cover (60 to 220 g/m <sup>2</sup> )
<b>Stapling</b>	100 sheets Front single (landscape), rear single (portrait), dual staples, multiple staples
<b>Hole Punch (Optional)</b>	Option 1 – 3-hole punch Option 2 – 2-hole Legal punch

 <h3>HIGH VOLUME FINISHER WITH BOOKLET MAKER</h3>	
<b>Capacity</b>	Top Tray – 250 sheets Stacking Tray – 3,000 sheets (2,000 sheets with Z-Fold/C-Fold)
<b>Sizes</b>	5.5 x 8.5 in. (A5/148 x 210 mm) to 11 x 17 in. (A3/297 x 420 mm)
<b>Weights</b>	16 lb to 57 lb bond/80 lb cover (60 to 220 g/m <sup>2</sup> )
<b>Stapling</b>	100 sheets Front single (landscape), rear single (portrait), dual staples, multiple staples
<b>Hole Punch (Optional)</b>	Option 1 – 3-hole punch Option 2 – 2-hole Legal punch
<b>Booklet Maker Capacity</b>	Tray stop up: 25 booklets (1-15 sheets per booklet) Tray stop down: Unlimited
<b>Sizes</b>	Letter – 8.5 x 11 in. (A4/210 x 297 mm) Legal – 8.5 x 14 in. (216 x 356 mm) Ledger – 11 x 17 in. (A3/297 x 420 mm)
<b>Weights</b>	16 lb to 57 lb bond/80 lb cover (60 to 220 g/m <sup>2</sup> )
<b>Stapling</b>	Saddle-stitch (2-15 sheets/8-60 page booklet)
<b>Folding</b>	V-folding (1-15 sheets/unstapled)

## **WHAT BERTL LIKED**

- 100-sheet bypass tray is easily adjusted to accommodate different paper sizes including envelopes.
- Easy to adjust and fill paper drawers
- Paper capacity can be expanded to a substantial 7,300 sheets with the High Capacity Feeder.
- Versatile media handling and flexibility, with the ability to print on stock as heavy as 80 lb cover (220 g/m<sup>2</sup>) and paper sizes up to 12.6" x 18".
- Advanced finishing options that include booklet-making, stapling, hole-punching and z-folds.
- Output bin (when office and high volume finisher is installed) can hold up to 3,250 sheets for large jobs.

## **WHAT BERTL WOULD LIKE TO SEE**

BERTL was very satisfied with the ColorQube 9303's paper-handling and finishing capabilities.

## About BERTL

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The success of an organization depends on its ability to manage its information and assets. An effective workflow process requires the complex integration of information, devices, software, and people.

IT managers, office managers, and other knowledge-management professionals need to know what digital imaging devices would best serve their specialized workflow processes.

BERTL's services are designed around this real-world framework, delivering business consumers the independent analysis and insight needed to make critical decisions about digital imaging's role in their organization.

## Independent Analysis and Insight

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BERTL's reports, comparative data, and strategic guides look at digital imaging through the eyes of the business user. The research examines not only the technical features, but also vertical market applications, and business benefits. The impact on worker productivity is a primary concern.

BERTL is 100% independent. Business users worldwide trust BERTL for objective, unbiased analysis of digital imaging systems.

## BERTL Services

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### Reports and Star Ratings

BERTL analysts provide detailed reports on the technical and practical benefits of thousands of color and monochrome workgroup, office, graphic arts, and production devices.

### Product Specifications

DataCheck Gen II provides the most current competitive data on printers, copiers, MFPs, fax devices, wide format printers, scanners, and more.

### News, Interviews, and Analysis

The *ITchat* online magazine provides insight into the dynamics and trends of the digital imaging marketplace through interviews, feature articles, and software reviews.

## BERTL Awards

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BERTL analysts recognize the leading devices and software solutions in the semi-annual BERTL's Best awards. BERTL also honors the performance of manufacturers in the annual Readers' Choice selections.

## Contact BERTL

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BERTL Inc.  
20 Just Road, Suite 130  
Fairfield, NJ 07004  
Phone: 1-973-882-0200  
Fax: 1-973-882-0201  
Email: [info@bertl.com](mailto:info@bertl.com)  
[www.BERTL.com](http://www.BERTL.com)