



Test Report

MULTIFUNCTIONAL PRODUCTS
Xerox CopyCentre/WorkCentre/WorkCentre Pro 35
35 PPM/Segment 3
Copier/Printer/Fax

GENERAL APPRAISAL



One of the most productive Segment 3 multifunctional products tested, the Xerox WorkCentre Pro 35 provided an outstanding overall performance in BLI's three-month evaluation. In addition to its impressive productivity, the 35-ppm WorkCentre Pro 35, which offers copy and network print functions in its standard configuration, but was also tested with its optional dual-line walk-up fax functionality, demonstrated a number of other strengths in the tests, including excellent multitasking, very good ease of use and good output quality. The Xerox WorkCentre Pro 35 also proved to be reliable, experiencing no malfunctions during BLI's 150,000-compression durability test and misfeeding eight times, for a misfeed rate of one misfeed per 18,750 impressions. What should contribute to good overall up-time for this model is its deployment of user-replaceable consumables, including the drum (xerographic module), fuser unit and document feed roller assembly. This design, while it requires more user intervention than most other multifunctional products tested in this range, eliminates the need for users to place a service call and wait for

service when these components reach their life expectancies. BLI test technicians found replacement of toner and all the user-replaceable components to be easy. The cost of the consumables is bundled into the cost of service contracts, which will likely still be desired by most buyers.

In its exceptional productivity performance, the WorkCentre Pro 35 demonstrated overall efficiency rates that are above average to well above average in all print and copy modes. Its overall simplex copy efficiency is the highest for models in the group, as is its overall efficiency in the 1:2 duplex copy mode, while overall efficiency in 2:2 duplex copy mode is among the highest. Overall efficiency is also well above average in both simplex and duplex print modes, leading the group in duplex print mode and tied with one other unit for the highest in simplex print mode. The unit's first-copy time from platen, at 6.0 seconds, is among the fastest for tested Segment 3 models, although first-copy time from the document feeder is a few seconds slower than average. Based on a 433-MHz processor, the Xerox WorkCentre Pro 35 also performed well in the raster tests, efficiently processing all of the file types used in testing (Word, PageMaker, TIFF, JPG, and PDF), with competitive first-print-out times.

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General Appraisal *continued*

The Xerox WorkCentre Pro 35 also offers excellent multitasking capabilities. Testing revealed that multiple copy jobs, limited only by memory capacity (which was not reached in testing) can be programmed while a copy or print job is in progress. Some products tested in this range are limited to four jobs that can be programmed ahead and some don't allow programming ahead of any jobs. Also noteworthy is that another job can be programmed as soon as the programming of the previous job is complete, while originals are still being scanned. Moreover, a priority of 1 or 2 can be assigned to two of the functions in order to have these types of jobs take precedence over others. Output quality of the Xerox WorkCentre Pro 35 was also good, earning BLI's highest image quality rating for all types of output (text, line art, halftones and solids) evaluated in both print and copy modes.

An attractively designed unit, the WorkCentre Pro 35 also offers excellent overall ease of use. It features a distinctive dark blue panel in the back that indicates all the functions of the unit and a convenient work surface to the left of the platen that serves as a resting place for users to organize their copies and originals. Unlike most systems, it allows for a left-to-right workflow, with documents fed into the feeder on the left side of the machine and picked up from the finisher on the right. The uncluttered control panel features an easy-to-read LCD touch screen with an intuitive menu system. Users can choose which menu should be displayed as the default screen for the control panel. For example, in environments where users will be using a range of different functions, the "All Services" screen, which presents the user with all

the different functions, would be a good choice. In offices in which there will be a lot of walk-up copy use, the copier screen could be the default. The copier screen offers a good layout that presents users with all the features required for most typical copy jobs from the main screen, without requiring them to access additional menus. The control panel also offers extensive status information on all jobs in queue—copy, print and fax—as well as all completed jobs, and enables walk-up users to move their job to the head of the queue with a single keystroke. In addition, a machine status key provides access to a wide range of device information, including the life of consumables and meter counts.

The Xerox WorkCentre Pro 35 also offers good feedback to PC workstations, via its well designed bidirectional print drivers which inform users at the point of need—right before they send their job—of such factors as whether or not enough paper for the job is loaded or if a problem exists that would interfere with the production of a job. Whether or not an error condition exists, the user can click on the "Status" button on the driver screen to obtain additional information on device status. And although users don't receive pop-up print job completion notification, they can view lists of active jobs (to see where their job is in the queue) and completed jobs, along with status information, from the status screen of the driver. In addition, a good range of device and print job status is available from the Web utility (CentreWare Internet Services). Ease of removing misfeeds was also judged to be good, because in spite of the unit's compact design, the modular components are easily moved out of the way to provide access to misfed sheets.

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General Appraisal *continued*

Connectivity

Procedures for installing the WorkCentre Pro 35 on the network and installing its drivers on users' PCs are highly automated. Indeed, BLI test technicians cite them as among the best—if not the best—seen to date in testing of multifunctional products. Configured standard with the network print controller, the Xerox WorkCentre Pro 35 includes Microsoft-certified PCL 5e, 6 and PostScript 3 (emulation) print drivers for Windows 98, 2000, NT 4.0, Me and XP, as well as the necessary PPDs for Macintosh operating systems. Installation of the drivers on Windows XP workstations is automated, as is installation on Windows 2000 workstations (provided there are no open utilities); the auto-install routine does not work for Windows 98 workstations (an error code is generated). BLI used the Add Printer wizard to install the drivers to a Windows 98 workstation. Also simplifying the procedure is that multiple drivers can be installed at once (other multifunctional systems require repeating the installation process for each different driver desired). Once the installation process is complete, any configured accessories are automatically detected and the information is available for viewing in the driver, without the user having to initiate the process, as is the case with some systems, or having to manually specify the configuration, which is the case with some other systems. The PCL and PostScript drivers are very similar in appearance and functionality (with the only differences being those that are typically found between PCL and PostScript) and are very easy to use, although one criticism cited was that while most commonly used features can be selected from the main screen, quantity must be selected from a separate screen.

In addition to offering the previously mentioned status information, including a paper gauge, and most of the features that would be expected of a unit in this range, such as secure print and proof print, the drivers offer delayed print, the ability to select a banner page (alternatively, service can enable generation of banner sheets from the controller), job review, accounting (when enabled, the user must enter a code in order to print) and a choice of enhanced resolution modes in addition to 600-x-600-dpi resolution. Direct printing of a range of file types, including TIFF and PDF, is possible without needing to open the application. Also supported is IP printing, whereby from the embedded Web page, users can submit print-ready PCL or PostScript files for printing. Although not tested on this unit, the Xerox WorkCentre Pro 35 supports scan to e-mail, Internet fax and scan to network-connected PCs via FTP. The scan functionality, which supports LDAP and authentication, performed well and was very easy to use when tested on other Xerox units tested by BLI.

Administration of the device on the network is accomplished via the CentreWare Internet Services Web utility, which is very easy to use, thanks in part to an exceptional help function. In addition to allowing configuration of device settings, the Web utility also provides a good range of information, including error messages, paper status, consumables gauges, and meter counts for copies, prints, faxes (and other functions when equipped with options), as well as meter counts by user. Also offered is CentreWare Web, which allows monitoring and management of multiple output devices on the network (not just Xerox models).

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General Appraisal *continued*

Configured as tested with the dual-line 33.6-Kbps walk-up fax option (a single-line fax option is also offered), which effectively doubles capacity, the Xerox WorkCentre Pro 35 performed well as a fax, with a competitive scan-to-memory speed of 2.69 seconds and good procedures for transmitting from memory after a failed communication. The WorkCentre Pro 35 also supports integration with network fax servers offered by Xerox partners. When so configured, walk-up fax is automatically enabled on the device without requiring purchase of the walk-up fax option. When the unit is configured in this manner, walk-up and network faxes are routed to the fax server, which handles all transmissions and receptions for the enterprise.

Other noteworthy features of the Xerox WorkCentre Pro 35 include a competitive standard paper capacity of 1,200 sheets that is expandable to 4,800 sheets, which is among the highest for units in the 30- to 40-ppm speed range; a wider throughput range from the paper drawers (16-lb. bond to 110-lb. index) than that of any other model in this speed range; the ability to produce up to 9,999 copies in a single run (all other competitors in this group can make up to 999 copies in a single run); a standard DADF (Duplexing Automatic Document Feeder) with a competitive capacity of 75 sheets; 2,150 copy control codes—the highest number for units in this speed range; and high standard and maximum copier RAM of 320 MB and 512 MB, respectively. Although the copy function lacks a hard drive and does not enable electronic storage of hardcopy documents on the device for printing on demand from the control panel, the print controller has a 9.1-GB hard drive, plus a separate 128 MB of memory. The unit's tested toner yield

is also higher than average for Segment 3 models tested. Output options available include an offset catch tray and the tested office finisher, which holds 2,250 sheets and staples up to 50 sheets per set in multiple positions. Two-hole and three-hole punch options are also available. Other noteworthy options include a security overwrite option, which protects information stored on the device by overwriting it either at specified times or on demand; and Copier Assistant software, which is designed to make it easier for users who are visually impaired, have limited dexterity or use a wheelchair to access and use the system. It provides users with an alternative to the standard touch-screen controls, displaying an enlarged user interface on a PC, and features text-to-speech capability that walks users through copying steps.

Shortcomings

Testing revealed only a few shortcomings of the Xerox WorkCentre Pro 35: 1) While not difficult, the need to always press a key to confirm the paper size after opening the paper drawer, even if just loading paper of the same size, was found to be an inconvenience. Moreover, if a user forgets to confirm the size, any waiting print or copy jobs will be held up. This requirement does provide the advantage, however, of letting users accurately know the color, type and size of paper in each drawer from the driver and the control panel. 2) All but one model in this range offers greater choice in finisher options, including a saddle-stitch finisher for producing finished booklets. 3) Most tested models in this range offer the ability to pull from more than one paper source for a print job to enable, for example, printing the first page of a document on a differ-

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General Appraisal *continued*

ent type of paper (letterhead, for example) than the rest of the document.

Pricing Analysis And Summary

BLI's retail pricing analysis reveals that the Xerox WorkCentre Pro 35 is priced higher than the average for comparably equipped units in the 30- to 40-ppm speed range. While toner cost per page is better than the average for tested Segment 3 units, a complete supplies cost per page could not be calculated, since Xerox factors the cost of xerographic modules and other consumables into service contracts.

A superior choice among Segment 3 multifunctional products, the Xerox WorkCentre Pro 35 is an outstanding performer whose exceptional productivity and other strengths highlighted in this general appraisal lead BLI to highly recommend it for offices in need of a multifunctional product for monthly volumes of up to 70,000 impressions.

Note: According to documentation provided by Xerox, a new right panel was incorporated into production in late November 2003 to address a manufacturing issue observed in a small percentage of units (slight bowing of the door, causing it to come in contact with the inverter shaft, result-

ing in noise and possible misfeeding). According to Xerox, service technicians have been instructed to trim the tabs on the panel should this issue be encountered.

Copy Quality:

- Text:** Good
- Line art:** Good
- Halftones:** Good
- Solids:** Good

Print Quality:

- Text:** Good
- Line art:** Good
- Halftones:** Good
- Solids:** Good

Ease of use: Good

Ease of maintenance: Good

Estimated waste: Low

Estimated downtime: Low

Misfeeds: 8

Misfeed rate: 1 per 18,750
..... impressions

**Total service calls
(including PMs):** 0

MIBF: Not applicable

MIBS: Not applicable

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