XEROX®

Technology | Document Management | Consulting Services

Xerox Nuvera® 100/120/144 EA Digital Production System

System Release 8.0 with FreeFlow™ DocuSP® 5.1

Customer Expectations Document

Version: f

April 26, 2007

Includes:

- Xerox Nuvera® 100/120/144 EA Digital Production System
- Options:
  - Scanner Module
  - Second Sheet Feeder Module
  - Insertion Module
  - One or 2 Basic Finishing Modules
  - Finishing Transport Module
  - Inline Finishing options
  - Inline DFA Finishing Options
  - Multifunction Finisher (MFF)

BFM BFM

Multifunction Finisher Professional

Xerox DS5000

Xerox SquareFold BookletMaker

CP Bourg BDFx BookletMaker w/optional SquareEdge Module

GBC Fusion Punch II

Xerox DB120-D Document Binder

Xerox Manual & Book Factory

Table of Contents

Introduction

The purpose of this document is to help you understand the current features and capabilities of the Xerox Nuvera® 100/120/144 EA Digital Production System (DPS). Review of this material is recommended prior to your signing an order for a Xerox Nuvera® 100/120/144 EA Digital Production System.

This document addresses high-level expectations. Additional details are provided in the training documentation.

Product Overview

The Xerox Nuvera® 100/120/144 EA Digital Production System sets a new benchmark in the world of on-demand printing. It is a networked printing system comprised of multiple modules. The Xerox FreeFlow™ Document Services Platform (FreeFlow™ DocuSP®) is integrated into the Printer Module. The printer module may be acquired with simplex, letter size / A4 speeds of 100, 120 or 144 impressions per minute. The optional Scanner Module with 300 sheet input tray scans at 120 images per minute, simplex or duplex at 600 x 600 dpi. Two Sheet Feed Modules (SFM's) are available, one with 4 trays, the other with 2 trays having more large-format capacity. A SFM may also be installed after the printer module and used as an inserter. The Printer module prints at 4800 x 600 dpi utilizing a state of the art dual beam laser raster output scanner (ROS) with dedicated image processing hardware. The Finishing Transport Module (FTM) provides the capability to interface with a variety of production inline document finishing architecture (DFA) finishing devices. The Basic Finishing Module (BFM) stacks and provides stapling in single or dual positions. Up to two BFM modules (one a BFM Plus) can be used to enable continuous running with unload while run capability. A BFM Plus module can also be used in tandem with the FTM to enable inline DFA finishing. The Xerox Nuvera® EA DPS, with the above production finishing options, has a wide range of paper latitude, including coated stocks. Alternatively, the 100 and 120 ppm versions of the Xerox Nuvera® EA DPS can also be used with a Mutifunction Finisher module, providing flexible mid-range finishing options.

Crucial Performance Expectations

The Xerox Nuvera® 100/120/144 EA Digital Production System is a “clean-sheet” design utilizing innovative technologies. It is the new base platform for Xerox monochrome products.
The following expectations should be explicitly set. Please see the appropriate section of this CED for further detail.

Availability

The Xerox Nuvera® 100/120/144 EA Digital Production System will be available on a monthly average 92 – 95%of the time.

- Availability is defined as all of the time the machine is not being serviced, or waiting for service.
- Given similar service coverage, DocuTech® / DocuPrint® availability averages up to 95%.

Media Capability

- Approved stocks can be found in the Compatible Media List in this document
- Reinforced stocks should be limited to 90 sheets loaded in a tray at one time
- The system performs more reliably with long grain paper
- Windowed stocks are not supported – performance (jams) maybe degraded.

- **Envelopes**

  Envelopes should be limited to 60 loaded in a tray at one time. Nuvera® feeder trays feed until almost empty but not until empty, leaving 20~40 sheets remaining. When running envelopes frequent reloading of the feeder trays will be required.
  Very slight wrinkles (1/2 inch long) may occur on the trail edge of envelopes at the corners.

Due to the nature of feeding envelopes with flap open, some mis-stacking may occur in the top tray as the envelopes catch on the open flaps.
Envelopes can only be sent to the Top Tray. In the case of the Multifunction Finisher, the maximum limitation in the Top Tray is 15.

- **DocuCards**

  DocuCards can only be loaded 100 at a time in a tray. Nuvera® feeder trays feed until almost empty but not until empty, leaving 20~40 sheets remaining. When running DocuCards, frequent reloading of the feeder trays will be required.
  DocuCards can only be run to the Top Tray of the finisher. Some mis-stacking may occur as the DocuCards catch on the edges of the stacked sheets.
  When using DocuCards, it is recommended that you use a Tiltatron (available from the Customized Application Service (CAS), which can be contacted at customizedapplications.service@xerox.com).

Configurations using the Basic Finishing Module, or the Finishing Transport Module

- The Xerox Nuvera® Digital Production system images on a wide range of both coated and uncoated papers. Results may vary depending on the paper used. We are pleased to consult with you to help you maximize your objectives.
- Media capabilities vary with finishing options. Please refer to the System Media Capability table in this document. (p. 8)
- Coated stocks may exhibit issues such as higher jam rates, smearing, loss of halftone image quality, mottle, and light solid areas.
- Coated stocks should be used in environmental conditions where the ambient temperature is between 60° and 72°F and the relative humidity is between 20% and 55%
- Heavier weight stocks (>220 gsm) may experience toner adherence permanence issues, depending on the type of material being used. Please expect degraded performance with parchments, vellums, and other very smooth or very rough heavy weight stocks. As always, it is important to verify the application prior to any production run
- Tab jobs must be run with straight (not reverse) collated tabs.
- Images printed on Mylar tabs are typically degraded by toner scatter.

Configurations using the Multifunction Finisher

- Coated stocks and heavyweight stocks (>220 gsm) are not supported.
- Tabs fed from
  - The SFM must use reverse collated tabs
  - The MFF Pro Plus Insertion Tray must use forward collated tabs
  - Tabs feeding from the Inserter Module is not supported
  - Also, running tabs requires proper use of the supplied Tab Guides
- Tabs are supported when the number of segments is 10 or less.
- Images printed on Mylar tabs are typically degraded by toner scatter.
- Drilled Paper & Tab Jobs: Currently most jobs are delivered face down, with the bind edge trailing to match the requirements of the finisher. When tabs are run to the MFF, the tabs must be delivered with the tab leading and this requires an inversion at the exit of the paper path and entrance into the finisher. It is quite common to run drilled paper when running tabbed jobs, and this requires the user to reverse the loading of the drilled body stock in the tray such that the drilled edge is opposite what the paper tray loading label for drilled body stock shows.
- Certain stocks (stocks with high clay content and / or composed of other high density materials) may reduce the number of sheets that can be stapled and / or result in mis-staples.
- The Sheet Enhancement Module (SEM) is not available for use with the MFF.

FreeFlow™DocuSP®

- Neither LCDS nor IPDS support is available on configurations with an MFF.
- The PCI Ultra SCSI SE Host Adaptor kit for the QIC and 4mm tape drives used with previous Xerox Production Systems does not work with the Next Generation FreeFlow™ DocuSP® Controller in the Xerox Nuvera® EA Production Systems. A compatible PCI ULTRA SCSI SE Host Adaptor kit for the Next Generation FreeFlow™ DocuSP® Controller is available as an option.

- DFA devices do not support single page offsetting specified within the job or set. Offset at job or set boundary is supported. Single page job or set will offset.
- There is no floppy drive on Nuvera®. Resource loading may be accomplished via the LTO Tape option, QIC tape or over the network.
- The FreeFlow™ Print Manager Applet (previously available via clicking on the "Job Submission Applet" in the Web Browser) is no longer included with the system. Note that the standalone FreeFlow™ Print Manger product continues to be available for purchase.
- Stapling and hole-punching cannot be invoked together from FreeFlow™ applications. If this is required, a queue override can be used to invoke stapling or hole-punching.

Printer Module

- This is not a print to edge system due to potential image quality defects on the edge of the page.
- Printing on SRA3 can result in inboard and outboard edge image quality defects.
- The Nuvera® Digital Production System provides very good support for imaging on pre-printed materials. However, to obtain best results, please follow the guidelines outlined here:

  Design the pre-printed image so that no ink, varnish, or aqueous coating is placed in the area to be printed on by Nuvera®. Toner does not adhere as well to the stock when printing over inks or varnish. If Nuvera® must print over pre-printed ink, results are more likely to be acceptable if the color is screened back to less than 30%, or an uncoated base stock is used.

  Use a laser-compatible printing process for the pre-printed stock. Choose inks, varnishes, and coatings that are temperature stable and have low levels of petroleum distillates. UV-cured inks are recommended, to insure complete curing before printing on with Nuvera®. Do not use stock on Nuvera® that has been pre-printed on xerographic equipment.

  Select base paper stock approved for use on Nuvera® (see the Compatible Media List section).

  There are other factors that should be taken into account to successfully print on pre-printed stocks. Refer to the Xerox Nuvera® DPS Paper Guide, available on Xerox.com, for additional considerations and performance expectations.

- 8½" x 14" paper is loaded short edge feed and runs at 72 pages per minute simplex on 120 and 144 PPM configurations and runs at 60 pages per minute on a 100 PPM configuration. Refer to the Printer Module Section for a summary of engine speed for various paper sizes.
- When feeding paper smaller than 8½" (216mm) in the cross process direction, there may be some degradation of image quality. It is recommended that the customer test their applications for such cases.

Inserter Module

- LCDS and IPDS applications are currently not able to pull paper stocks from the Insertion Module.

Finishing Devices

Finishing Transport Module (FTM) with Document Finishing Architecture (DFA) finishing

- Substrates that tend to exhibit curl when being fed through the Xerox Nuvera® system can cause functional problems in the finishing devices. In most cases, the Sheet Enhancement Module will deliver flat output. In cases where the output may still need adjustment, you can fine tune the Sheet Enhancement Module controls or you can manually specify the amount of decurling you prefer. See the 'User Guide and Training Aid: How Do I? – Manage Paper Curl', for additional information.
- The DS5000, Bourg BDFx, and Xerox Square Fold Booklet Maker support a specific range of coated paper; all other supported inline DFA finishing devices do not support coated paper. Refer to specific solution planning guides for details.

- Paper latitudes are unique for each inline finishing solution.
- The Xerox SquareFold Booklet Maker Covers Insertion Module (CIM) is not supported for the SquareFold Booklet Maker. As an alternative, the Inserter Module can be used for covers insertion except when sending LCDS or IPDS jobs. The Bourg BDFx Booklet Maker with the BCFx Covers Feeder can be used with LCDS or IPDS jobs that require covers.
- Supported Inline DFA Finishing Solutions are compatible with specific Xerox Nuvera® configurations. Consult finisher module details in this document and, for more details, the Solutions Planning Guideline for the selected DFA Finishing device. The Finishing Solutions Planning Guides can be accessed by Xerox sales Reps at http://xww.thefic.xerox.com/dsweb/View/Collection-113169.

Basic Finishing Module (BFM) and Basic Finishing Module Plus (BFM Plus)

- Substrates that tend to exhibit curl when being fed through the Xerox Nuvera® system can cause functional problems in the finishing devices. In most cases, the sheet enhancement module will deliver flat output. In cases where the output may still need adjustment, you can fine tune the Sheet Enhancement Module controls or you can manually specify the amount of decurling you prefer. See the 'User Guide and Training Aid: How Do I? – Manage Paper Curl', for additional information.
- The BFM and BFM Plus do not offset paper sizes larger than 11x17" / A3. This means that 12x18 or 12x18.5 cannot be offset. For these sizes, software ignores any offset programming selection.
- For reliable stacking, stack size should be limited for certain jobs:
  --Stapled sets of 15 sheets or smaller are limited by machine control to 100 sets.
  --Stapled sets of coated stocks stack less well, and should be managed to 50 by the operator.
  --Stapled sets should be offset stacked.
  --The stack height limit can be operator adjusted.
- Banner and slip sheets should be greater than or equal to 90 gsm (24 lb bond)
- Slip-sheets must be the same size as the body sheets
- When stapling sets with mixed size stock, the stock must be the same dimension in the Across Feed direction, and the dimension differences should be within 13mm (½") in the feed direction.
- Drilled paper must be loaded with the holes leading (e.g. to the left) when using two Basic Finishing Modules.

Multifunction Finisher

- Statement size paper (5.5" x 8.5") and Envelopes (as noted above) will be delivered only to the top tray.
- Staple locations for non-standard size papers (e.g., standard sizes are A4, Letter size, etc.) will be slightly asymmetrical. The staple will be located in the position appropriate for the next nearest standard paper size.
- Substrates that tend to exhibit curl when being fed through the Xerox Nuvera® system can cause functional problems in the finishing devices. On MFF systems (which do not include the Sheet Enhancement Module), it may be necessary to adjust the Print Engine decurler in order to get the substrate to become flatter, so that the finisher runs with optimal performance. The proper Print Engine decurler setting will vary depending on the substrate and the ambient environmental conditions. Paper left opened overnight may exacerbate curl.
- Tearing of booklet covers near the staples can occur with booklets using 9 or more sheets of paper, under the following conditions: a) there is high image coverage around the gutter area on the inside of the cover or on the inside or outside gutters of the first couple of booklet sheets (note that gutter area image coverage on the innermost sheet of the booklet is OK), or, b) the cover stock is smooth and/or lightweight (<80gsm). With certain other stocks (coated stocks, or uncoated stocks with high area coverage Xerographic Color Images), the cover tearing can occur even with booklets containing less than 9 sheets of paper.

FreeFlow™ Digital Workflow Collection

- FreeFlow™ Makeready, Web Services and Process Manager, version 5.0 SP4, is the first version to provide named support for the Nuvera® EA family. Compatibility support is provided in versions 4.x; however, customers with these earlier versions may need to upgrade since SPAR support will not be available.

New Capabilities with Xerox Nuvera® System Release 8.0

Note that this software release is only available for Nuvera® EA Digital Production System configurations. It is not compatible with Nuvera® Copier/Printer, Nuvera® Digital Production System, or the Nuvera® MX Digital Production System configurations.

- A new toner (EA) is enabled in this configuration that uses a smaller particle size. Overall image quality is improved because of higher fidelity due to the smaller particle sizes, and reduced toner mass results in more reliable fuser stripping. These result in performance improvements across the supported media range, and enable less frequent service. Specific image quality benefits include:
  - sharper text
  - sustained halftone uniformity
  - no image scatter on coated stocks
  - no toner puffs.
- EA systems include one toner bottle, yielding 210K images at 6% area coverage.
- The Multifunction Finisher is now also available in the Pro Plus configuration, which adds hole punching and insertion (via an Insertion Tray) capabilities
- Improved system reliability and stacking performance with the inclusion of the new Sheet Enhancement Module (SEM) on configurations that include the BFM or FTM finishing modules.
- Enablement of 2 BFM Plus units in combination with downstream 3rd party finishing via the Finishing Transport Module
- A base offering of DocuSP® that consists of a single queue and a simplified media programming model. An optional upgrade, known as the Productivity Pack, enables multiple queues and enhanced media management using the stock library.
- A base Image Quality offering of a 125 lpi halftone screen, with an optional Enhanced IQ upgrade to include 85, 106, 134 and 156 lpi halftone screens. These screens are applicable to PS/PDF/TIFF/PCL DataStreams.
- The Windows Drivers now support bi-directional communications. Also available is a driver for the Windows Vista platform
- Jam recovery offset sheet in the BFM configuration that enables easy stack inspection at each occurrence of a jam in a run
- The IPDS Finishing Operation Triplet is now supported (for stapling operations only) as part of an XOH Define Group Boundary command.

System Media Capability– Xerox Nuvera®

With individual Output / Finishing Devices

Production System with various finishing options	Dimension		Weight	
	Process Direction	Cross Process Direction	Uncoated stock	Coated stock
Multifunction Finisher (MFF) Stacker / Stapler	5.8 – 18.5 in. 148 – 470 mm	8.0 – 12.8 in. 203 – 325 mm	16 lb. bond – 120 lb. index 56 – 220 gsm	N/A
MFF Top Tray	5.5 – 18.5 in. 140 – 470 mm	8.0 – 12.8 in. 203 – 325 mm	16 lb. bond – 120 lb. index 56 – 220 gsm	N/A
MFF Booklet Maker	Only specific sizes are supported – please see the section on "Multifunction Finisher", later in this document			N/A
MFF Inserter Tray	6.93 – 18.5 in. 176 – 470 mm	8.0 – 11.73 203 – 298 mm	16 lb. bond – 120 lb. index 56 – 220 gsm	N/A
MFF Hole Punch 2 – Holes 3 – Holes 4 – Holes	 5.83 – 18.0 in. 148 – 457 mm 5.83 – 18.0 in. 148 – 457 mm 5.83 – 18.0 in. 148 – 457 mm	 8.0 – 12.64 in. 203 – 321 mm 9.13 – 12.64 232 – 321 mm 10.04 – 12.64. 255 – 321 mm	16 lb. bond – 110 lb. index 56 – 200 gsm	N/A
Basic Finishing Module (BFM)	7.0 – 18.5 in. 178 – 470 mm	8.0 – 12.0 in. 203 – 305 mm	16 lb. bond – 90 lb. cover 56 – 250 gsm	60 lb text – 90 lb cover 90 – 250 gsm
BFM Top Tray	5.5 – 18.5 in. 140 – 470 mm	6.9 – 12.6 in. 175 – 320 mm	16 lb. bond – 90 lb. cover 56 – 250 gsm	60 lb text – 90 lb cover 90 – 250 gsm
BFM Plus	5.5 – 18.5 in. 140 – 470 mm	8.0 – 12.6 in. 203 – 320 mm	16 lb. bond – 90 lb. cover 56 – 250 gsm	60 lb text – 90 lb cover 90 – 250 gsm
Finishing Transport Module (FTM) Top Tray	5.5 – 18.5 in. 140 – 470 mm	8.0 – 12.6 in. 203 – 320 mm	16 lb. bond – 90 lb. cover 56 – 250 gsm	60 lb text – 90 lb cover 90 – 250 gsm
FTM bypass throughput without rotation	5.5 – 18.5 in. 140 – 470 mm	8.0 – 12.6 in. 203 – 320 mm	16 lb. bond – 90 lb. cover 56 – 250 gsm	60 lb text – 90 lb cover 90 – 250 gsm
FTM bypass output with rotation	10.0 – 12.6 in. 254 – 320 mm	7.0 – 14.3 in. 178 – 363 mm	16 lb. bond – 90 lb. cover 56 – 250 gsm	60 lb text – 90 lb cover 90 – 250 gsm
DS 5000 High Capacity Stacker	7.0 – 18.5 in. 178 – 470 mm	10.0 – 14.3 in. 254 – 363 mm	16lb bond – 80 lb cover 56 – 220 gsm	80 lb text – 80 lb cover 120 – 220 gsm
CP Bourg BDFx Booklet Maker Optional BCFx Covers Feeder	7.0 – 18.5 in. 178 – 470 mm	10 – 12.6 in. 254 – 320 mm	Body Stock: 16 lb bond – 110 lb index 60 – 200 gsm Cover Stock: 20 lb. bond – 10 pt cover 80 – 300 gsm Cover stock from BCFx: 20 lb. bond – 10 pt cover 80 – 300 gsm	Supported per the specifications included in the CP Bourg BDFx Booklet Maker Solutions planning guide
Xerox	7.0 – 18.2"	8.0 – 12.6 in.	16 lb bond – 110 lb. index	Supported per the

Production System with various finishing options	Dimension		Weight	
	Process Direction	Cross Process Direction	Uncoated stock	Coated stock
SQUAREFOLD® Booklet Maker	178 – 462 mm	203 – 320 mm	60 – 200 gsm	specifications included in the Xerox SQUAREFOLD® Booklet Maker Solutions planning guide
GBC Fusion Punch II	7.0 – 17.0 in. 178 – 432 mm	10.0 – 11.0 in. 254 – 279 in.	16 lb bond – 90 lb. cover 60 – 200 gsm	--
Xerox DB120-D Document Binder	A4, Letter LEF 210 – 216 mm	A4, Letter LEF 279 – 297 mm	18 lb - 32 lb bond 68 – 120 gsm (120 gsm should be used only as cover, dividers and inserts}	--
Xerox Manual & Book Factory BBF2005 No BPRF With BPRF BPRF & 18.5 in fold plate	5.5 - 12.0 in. 140 – 305 mm 5.5 – 17.0 in. 140 – 432 mm 5.5 – 18.5 in. 140 – 470 mm	8.0 – 14.0 in 203 – 356 mm 8.0 – 14.0 in 203 – 356 mm 8.0 – 14.0 in 203 – 356 mm	w/o BPRF (refer to the SPG for more information) Book Body: 16 lb – 40 lb bond 60 – 158 gsm Covers: 30 lb – 90 lb cover 63 – 250 gsm Min. Untrimmed book size: 8.25 x 5.5 in. (210 x 140 mm) Max. Untrimmed book size: 14.0 x 12.0 in. (356 x 305 mm)	--

Note. DFA finishing throughput entries assume finisher is immediately downstream from the FTM.

System Product Specifications Overview

Optimum Product Performance

Print Volume Range

The Xerox Nuvera® 100/120/144 EA Digital Production System is designed for an Average Monthly Print Volume (AMPV) as below.

System	AMPV	Conditions
Xerox Nuvera® 100/120/144 EA Digital Production System	100K – 1.5M (100/120 EA DPS) 150 K – 2.0M 144 EA DPS)	8.5 in. x 11 in./A4

Maximum Duty Cycle: Up to 3.7 million prints per month with the Xerox Nuvera® 144 EA Digital Production System.

Duty Cycle is defined as:

The maximum recommended monthly copy / print volume support under standard vendor supplied service (3 x 7 shift coverage). This defines the upper end of expected customer volume band for the device.

The Maximum AMPV / Duty Cycle cited above assume a print environment with dedicated skilled operators and production grade finishing alternatives, such as the Basic Finishing Module. Actual customer experience may vary in conjunction with the duty cycles of the selected third party or mid-production finishing alternatives available.

Products configured with Xerox mid-Production Finishing alternatives such as the Multifunction Finisher are expected to be used in environments with a Maximum AMPV of up to 500K per month.

The Customer should consider higher volume machines or multiple machines if average monthly volume approaches Duty Cycle on a constant basis.

Prints between service calls on a digital Xerox Nuvera® DPS are dependent on customer requirements for volume, applications, and throughput material. Specific customer requirements for Image Quality may further impact the number of service calls. Xerox Nuvera® trained operators can optimize performance output and minimize service calls.

Environmental Factors

Environmental Factor		Minimum	Maximum
Temperature		50° F (10° C) (Tested to 60° F (15.6° C))	87° F (30.6° C) (Tested to 80° F (26.7° C))
Humidity		15% RH (Tested to 15%)	85% RH (Tested to 80%)
Heat Emission (approximate) (SFM / Scanner, Printer Module, MFF Professional)		2,322 BTU / HR (Standby)	18,715 BTU / HR (Running)
Heat Emission (approximate) (SFM, Printer Module, BFM)		2,452 BTU / HR (Standby)	19,023 BTU / HR (Running)
Power Consumption (approximate) (SFM / Scanner, Printer Module, MFF Professional)		0.680 kw (Standby)	5,480 kw (Running)
Power Consumption (approximate) (SFM, Printer Module, BFM)		0.718 kw (Standby)	5,570 kw (Running)
Noise (Measured per ISO 7779 and declared in Bel per ISO 9296)	**SFM / PM / MFF Professional**	6.2 B - Standby	8.6 B - Running
	SFM / PM / BFM	6.6 B - Standby	9.0 B - Maximum
	SFM / PM / FTM	7.2 B - Standby	9.0 B - Running
	SFM / PM / FTM / DS5000	7.2 B - Standby	9.1 B - Running
Altitude (above sea level)		0	10,000 ft.

Product Space & Power Requirements

Item	Xerox Nuvera® 100/120/144 EA Digital Production System	Comments
Size – Printer w/ 1 SFM / Scanner & MFF	132" (W) X 29 " (D) X 61.6 " (H) 3353 mm x 737 mm x 1565 mm	
Size – Printer w/ 1 SFM & SEM / FTM	125" (W) X 29 " (D) X 61.6 " (H) 3175 mm x 737 mm x 1565 mm	Printer Digital Tower 61.6" (1565 mm) (Height) DFA finishing devices vary by device*.
Size – Printer w/ 1 SFM & SEM / BFM	124" (W) X 29 " (D) X 61.6 " (H) 3150 mm x 737 mm x 1565 mm	
Width of additional SFM	31.7", 805mm	Optional
Width of BFM Plus	49", 1233mm	Optional, BFM Plus and Interface Module used with BFM (with top tray) in dual BFM installations.
Service Space (MFF Config.)	Fixed: 163" (W) x 112" (D) (4140mm x 2839mm) Moveable: 163" (W) x 92" (D) (4140mm x 2336.8mm)	- Fixed (stationary) installation: rear of the system should be at least 30" from the wall, machine, or rear obstruction.. - Moveable installation: rear of the system should be at least 10" from the wall and must be on mobility plates OR hard surface floor AND with no more than 4 modules including MFF and MFF Interface Module.
Service Space (BFM / FTM Config. with SEM)	BFM: 145" (W) x 112" (D) 3683mm x 2839 mm FTM: 143" (W) x 112" (D) 3632mm x 2839 mm	At least 30" from the wall in rear. DFA finishing will increase width - FTM config. dimensions do not include DFA Finisher(s) dimensions or service space.
Weight (MFF Config. w/ scanner)	1,753 lb. (795.2 kg) Additional SFM – 423 lbs. (192 kg)	With consumables loaded, except media
Weight (BFM / FTM Config. with SEM)	BFM: 1763 lb. (800 kg) FTM: 1713 lb. (777 kg) Additional SFM – 423 lbs. (192 kg)	With consumables loaded, except media FTM config. listing does not include DFA Finisher(s) weight.
Power Requirements North America / Japan (MFF / BFM Finishing)	187 – 240 Volts AC (Nominal), 50 Amp , 50/60 Hz wall service Note – FTM and DFA finishers will require additional power	• UL & cUL compliant • Complies with the FEMP (Federal Energy Management Program) via the machine circuit breaker (CB); with the CB switched off, the system consumes less than 1 watt. • Energy Star (eStar) compliant** • Environmental Choice (Canada)** • Complies with Section 508 of the ADA Rehabilitation Act
Power Requirements Europe / FX-IBG	187 – 240 Volts AC (Nominal), 30 Amp + 20 Amp (2) , 50/60 Hz wall service Feeders and Finisher modules (BFMs) will need additional 187 – 240 VAC (Nominal), 20 Amp, 50/60 Hz wall service Note – FTM and DFA finishers will require additional power	• Units are compliant with applicable EU directives and are CE marked

* - Please refer to supported inline DFA finishing devices Solution Planning Guides for Product Space and Power Requirements.

** - the following configuration is not Energy Star compliant:

- 100 ppm printer-only configuration with a BFM

System Configuration and Installation

Installation Preparation Document

This section should be used in conjunction with the ***Xerox Nuvera® 100/120/144 EA Digital Production System Installation Planning Guide (IPG),*** the ***Xerox Nuvera® 100/120/144 EA Digital Production System Installation Preparation Document (IPD),*** and the supported inline DFA Finishing Device ***Solution Planning Guide,*** which contain detailed specifications for size, weight, electric, and environmental conditions. Only the most important requirements are stated here.

Customer Responsibilities

The following must be completed before system delivery and will be assessed in the final site check:

Item	Comments
Identify placement of the system	
Ensure the printer can be delivered to the site	
Supply the appropriate electrical connections	Dedicated power required
Install an exhaust duct to vent hot air to the air system or the outside if required	Heat vent kit is available (for stationary system installations only). The kit lowers the system's output from the nominal running heat emission level (see the Environmental Factors table) to 8,500 BTU/hr.
Install a network drop for Internet access	Automatic upload of data for remote diagnostics
Verify the strength and slope of the floor	
Meet room Environmental Specifications for temperature and relative humidity year round	This is essential to the system's ability to perform as expected; Xerox will not be able to resolve performance problems encountered when the area is not maintained within this operating range.
Connect system to network including proxy server information	

System Installation

System installation can take from 4 to 6 hours for a basic system, to 9 to 11 hours or more, depending on the number of feeders, finishers and system options being installed.

Availability

As with any other printing process, you will not plan production to the raw speed of the printer.

Your Xerox Nuvera® 100/120/144 EA Digital Production System will be available to you on a monthly average 92% to 95% of the time.

- Availability is defined, as all the time the machine is not being serviced or waiting for service by Xerox.
- Given similar service coverage, DocuTech® / DocuPrint® availability averages up to 95%.

Although the service call rate may exceed current DocuTech® products in the same speed range, overall system availability will become comparable.

Planning for volume requires taking many factors into account in addition to printer availability. These factors include pre-press workflow efficiency, job type and client expectations, use of qualified stocks, daily volume and number of jobs, job mix, area coverage, adherence to environmental specifications, and operator expertise and attention to procedures.

Operations

Item	Xerox Nuvera® 100/120/144 EA Digital Production System	Comment
Power Up	7½ minutes	If the environment does drift outside the specified range during the systems' powered down state, some period of image degradation can be expected at startup.
First Copy Out Time (FCOT)	8½ seconds (with one finisher and no inserter)	Copy job sent to the top tray; platen scan, simplex job, 8.5 x 11 LEF fed from tray 1
First Print Out Time (FPOT)	9½ seconds.	Printer should not cycle down as long as it receives an image to print within 5 seconds of completing the previous sheet.
Restart Time	5 minutes	
Billing Meters	Available via the Administration window.	Vary by operating company / country; ask local analyst or sales representative to explain your meter operation. Automated reading of the billing meter is available, if Remote Services are enabled.
Print Quality Adjustments	Automatic, brief pauses for registration or xerographic process adjustments to maintain high image quality	
Mixed Plex Printing	Switching between one-sided and two-sided printing does cause some loss of productivity. The extent of the loss is directly related to the frequency of the switch.	When producing collated sets run 1 to N, the system already optimizes performance. In other cases, adding a blank side to the job can minimize impact, but the sheet is billed.

Supplies and Component Yields

The consumable supplies listed below are engineered specifically for use in the Xerox Nuvera® 100/120/144 EA Digital Production System and provide the highest and most consistent image quality, maximum machine productivity, and uptime.

All yield estimates are based on the indicated 6% area coverage at standardized conditions using 8 ½" x 11" / A4 Xerox 20 lb. bond (75 gsm) stock. Please note that actual yields vary greatly depending on area coverage, paper stock, and image quality control settings. The current estimates are shown below.

Consumables

Supply	Yield Estimates
EA Toner	210,000 prints/bottle; 1 bottle per system (2nd toner bottle is available as an option)
BFM 100 Sheet Staple refills and drivers.	15,000 staples per supply package, The package contains three 5000 staple refills and 3 drivers
BFM 30 Sheet Staple refills and drivers	15,000 staples per supply package, The package contains three 5000 staple refills and 3 drivers
MFF 100 Sheet Staple Cartridge	Comes installed in machine. Filled with 1 - 5,000 staple refill, this cartridge typically lasts the life of machine.
MFF 100 Sheet Staple Refills	5,000 staples per refill, 3 refills per carton
MFF 50 Sheet Staple Cartridge	Required for initial 50-sheet stapler capacity order. Filled with 1 - 5,000 staple refill, this cartridge typically lasts the life of machine.
MFF 50 Sheet Staple Refills	5,000 staples per refill, 3 refills per carton.
Staples Refills for MFF Booklet Maker (1 for rear and 1 for front stapler required)	2,000 staples per box; 16,000 per carton (8 Boxes per carton)

Customer Replaceable Units

CRU	Yield Estimates
Waste Toner Bottle	1,200,000 prints
Waste Developer Bottle	680,000 prints

Disposal Process

All Toner Waste Bottles include a prepaid return shipping label, plastic bag, and tie in the box. This is the preferred method of disposal.

Empty dry ink containers and waste containers are safe and approved for local recycling with common commercially used plastics.

More information can be found at www.Xerox.com, under Online Supplies Ordering, Cartridge Recycling Program.

Xerox Productivity Plus (XPP)

The XPP option provides capability for the advanced customer to carry out certain maintenance activities. Before this capability can be enabled at a customer location, the customer personnel who will be performing maintenance need to be trained and certified by Xerox. Training is delivered in two phases. Each phase is one day of training. Customers may elect to participate only in phase one or in both phases. Phase 1 training covers use of diagnostic routines, photoreceptor removal and replacement, and power supply filter replacement. Phase 2 covers fuser, corotrons and additional filters. A manual and tool kit is provided with the training and a license is required in order to access the customer diagnostics and update High Frequency Service Items. Specific parts will be provided as on-site inventory.

prInteract (formerly Remote Services)

The Xerox Nuvera® Digital Production System is enabled with Remote Service features, including Automated Remote Monitoring and On Demand Machine Data Transfer. Remote Services provides the ability for the Xerox Nuvera® Digital Production System to securely transport the device's service and engineering data to a Xerox support server within Xerox's firewalled environment. Data is transported through the network using industry standard 128-bit encryption and Secure Socket Layer (SSL) transport protocols.

Enablement of Remote Data Transfer requires two steps:

- Populating of the customer's machine serial number into the Xerox server. This occurs at order placement if the customer selects the CONNECT option.
- Installing the customer's proxy server or Firewall information address on the machine. (Reference the System Administration Guide for details.)

To sign up for Meter Assistant, customers or Sales Specialists should visit xerox.com: Customer Resources: Submit Meter Reads for more information.

Kit Limitations

The Foreign Device Interface (FDI) kit and the Removable Hard drive kit cannot be installed on the same system.

Compatible Media List

The media listed on the following pages have been tested and approved for use in the Xerox Nuvera® DPS (when using a supported Inline DFA Finishing device, please refer to the individual Inline DFA Finishing Device Solution Planning Guide for a list of supported media types).

The Xerox Nuvera® Digital Production system images on a wide range of both coated and uncoated papers (uncoated papers only in configurations using an MFF). Results may vary depending on the paper used. We are pleased to consult with you to help you maximize your objectives.

Coated stocks should be used in environmental conditions where the ambient temperature is between 60° and 72°F and the relative humidity is between 20% and 55%. Coated stocks may exhibit issues such as higher jam rates, smearing, loss of halftone image quality, mottle, and light solid areas. Optimized printing may not be possible across the entire weight range of coated papers. Coated stocks under 120gsm may exhibit degraded performance - avoid any images with greater than 25% toner area coverage and dark images along the lead edge of sheets; also, machine to machine variation and tolerance stack ups may result in successful performance on one machine and not another.

Successful printing on pre-printed stocks is dependent upon many factors. Additional information and performance expectations are provided in the Xerox Nuvera® DPS Paper Guide.

The Xerox Supplies Group will be available to test particular media in a customer's application.

For more information about media, please see the Xerox Nuvera® Digital Production System Paper Guide available at www.xerox.com.

For information regarding specific substrates use in the Xerox Nuvera® DPS, please call Xerox Supplies at (800) 822-2200.

For More Information and Pricing contact your Xerox Supplies Representative, authorized Xerox merchant, or visit us on the web at **www.xerox.com.**

Legend				
	N - Not Recommended	1 - Simplex Only 2 - Bypass Tray 3 - Manual Duplex 4 - Long edge Feed 5 - Short edge Feed 6 - Machine Retrofit Required 7 - Limited duplex - image text or areas of toner coverage on uncoated side first.	8 - Remove frequently from output tray with 2-sided heavy toner coverage documents. 9 - Hi Cap 10 - Coated paper mode 11 - Heavy weight paper mode 12 - DS5000 Finisher 13 - Basic Finisher Module (B	

Order #	Paper and Application Thruput Media Compatibility Guide - Nuvera 8.0 test *Mock up*	Size	Xerox Nuvera® 100/120 EA DPS with MFF Finisher	Xerox Nuvera® 100/120/144 EA DPS with BFM / DS5000 Finishers
	Premium Digital Carbonless			
3R12420	2 Part Reverse/StraightW/C	8.5 x 11	Y1	Y1, 12 , 13
3R12421	2 Part Reverse/Straight W/P	8.5 x 11	Y1	Y1, 12 , 13
3R12422	2 Part Reverse/Straight W/C	8.5 x14	Y1	Y1, 12 , 13
3R12423	2 Part Reverse/Straight W/C	17 x11	Y1	Y1, 12 , 13
3R12424	3 Part Reverse P/C/W	8.5 x 11	N	Y1, 13
3R12425	3 Part Straight W/C/P	8.5 x 11	Y1	Y1, 12
3R12427	3 Part Straight W/C/P	8.5 x14	Y1	Y1, 12
3R12428	3 Part Straight W/C/P	17 x11	Y1	Y1, 12
3R12429	4 Part Reverse G/P/C/W	8.5 x 11	N	Y1, 13
3R12430	4 Part Straight W/C/P/G	8.5 x 11	Y1	Y1, 12
3R12431	4 Part Straight W/C/P/G	8.5 x14	Y1	Y1, 12
3R12432	Vert. Perf'd - 3 Part Straight W/C/P	9 x11	Y1	Y1, 12
3R12433	Vert. Perf'd - 3 Part Straight W/C/P	8.5 x 11	Y1	Y1, 12
3R12434	Universal Singles - CB Whiite	8.5 x 11	Y1	Y1, 12
3R12435	Universal Singles - CFB White	8.5 x 11	Y1	Y1, 12
3R12436	Universal Singles - CFB Whiite (Mini carton)	8.5 x 11	Y1	Y1, 12
3R12437	Universal Singles - CFB Canary	8.5 x 11	Y1	Y1, 12
3R12438	Universal Singles - CF Canary	8.5 x 11	Y1	Y1, 12
3R12439	Universal Singles - CF Pink	8.5 x 11	Y1	Y1, 12
3R12440	Universal Singles - CF Whiite	8.5 x 11	Y1	Y1, 12
	Specialty Media,Tabs,Synthetics,Binding Supplies			
3R4885	Docupac Folders - 90 lb. Index	9.5 X 11.75	Y	Y
3R5105	Docupac Laser Folder - 65lb. Cover	9.5 X 11.75	Y	Y
3R12414	Xerox Polyester Papers 3.7 r	8.5 x 11	Y	Y
3R12363	Xerox Polyester Papers 4.7 r	8.5 x 11	Y	Y
3R12364	Xerox Polyester Papers 3HD 4.7 m	8.5 x 11	Y	Y
3R4417	Tabs - 90# Index	9 x 11	Y	Y
3R5709	Tabs - Plastic Printable	9 x 11	Y	Y
	High Speed Labels			
3R3139	33 up - 2.8" x 1"	8.5 x 11	Y1	Y1
3R4474	24 up - 2.8" x 1.3"	8.5 x 11	Y1	Y1
3R5719	14 up - 4.24" x 1.6"	8.5 x 11	Y1	Y1
3R4475	8 up - 4.25" x 2.7"	8.5 x 11	Y1	Y1
3R3146	6 up - 4.25" x 3.7"	8.5 x 11	Y1	Y1
3R4476	1 up -8.5" x 11" (170 gsm)	8.5 x 11	Y1	Y1
	Ink Jet / Laser White Labels			
3R12050	33 up - 2.8" x 1"	8.5 x 11	Y1	Y1
3R12052	24 up - 2.6" x 1.25" (copier)	8.5 x 11	Y1	Y1
3R12056	8 up - 4" x 2.5" (copier)	8.5 x 11	Y1	Y1
3R12057	1 up - 8.5" x 11" (copier)	8.5 x 11	Y1	Y1
3R12051	30 up - 2.6" x 1"	8.5 x 11	Y1	Y1
3R12053	20 up - 4" x 1"	8.5 x 11	Y1	Y1
3R12055	10 up - 4" x 2"	8.5 x 11	Y1	Y1
	Transparencies			
3R3117	Clear, Stripeless	8.5 x 11	Y1	Y1
3R2780	Painted Stripe	8.5 x 11	Y1	Y1
3R3028	Paper Backed	8.5 x 11	Y1	Y1
3R3108	Removeable Stripe	8.5 x 11	Y1	Y1
3R6218	3HD - Clear, Removable Stripe	8.5 x 11	Y1	Y1

Paper Products				
3R11720	High Yield Business Paper (67 gsm)	8.5 x 11	Y	Y
3R11600	Business Plus 20lb. Paper (75 gsm) 96 Bright	8.5 x 11	Y	Y
3R11601		8.5 x 11 3-HD	Y	Y
3R11602		8.5 x 14	Y	Y
3R11603		11 x 17	Y	Y
	Business 4200 92 Bright			
3R2047	Business 4200 20 lb. Paper (75 gsm)	8.5 x 11	Y	Y
3R2641		8.5 x 11 3-HD	Y	Y
3R2051		8.5 x 14	Y	Y
3R3761		11 x 17	Y	Y
3R2531	Business 4200 24lb. Paper (90 gsm)	8.5 x 11	Y	Y
3R3317		8.5 x 11 3HD	Y	Y
3R3871		11 x 17	Y	Y
3R2353	Business 4200 28lb. Paper (105gsm)	8.5 x 11	Y	Y
3R3873		11 x 17	Y	Y
3R11661	Business 4200 65lb. Cover (163 gsm)	8.5 x 11	Y	Y
3R3004	Business 4200 90 lb. Index (163 gsm)	8.5 x 11	Y	Y
3R5102		17 x 11 SG	Y	Y
3R11668	Business 4200 110 lb. Index (199 gsm)	8.5 x 11	Y	Y
3R4299	Business 4200 Ring Tuff	8.5 x 11 3-HD	Y	Y
3R6296	Business Recycled 20 lb. Paper (75 gsm) 30%PCW	8.5 x 11	Y	Y
3R6297		8.5 x 11 3HD	Y	Y
3R6298		8.5 x 14	Y	Y
3R6299		11 x 17	Y	Y
	Perforated & Punched Business 4200 Papers			
3R4901	Horizontal 3 2/3" FB 24 lb. (90 gsm)	8.5 X 11	Y	Y
3R4900	Horizontal 3.5" FB 24 lb. (90 gsm)	8.5 X 11	Y	Y
3R5125	Horizontal 3.5" FB 20 lb. (75 gsm)	8.5x11	Y	Y
3R5126	Horizontal 3 2/3" FB 20 lb. (75 gsm)	8.5x11	Y	Y
3R12166	Horizontal 5.5" FB 20lb. (75 gsm)	8.5x11	Y	Y
3R4175	0.5" Vertical 20 lb. (75 gsm)	8.5 X 11	Y	Y
3R4160	0.5" Vertical 20 lb. (75 gsm)	9 x 11	Y	Y
3R4904	19 hole GBC 20lb. (75 gsm) 0.125" offset	8.5 X 11	Y	Y
3R4905	19 hole GBC 20lb. (75 gsm) 0.100" offset	8.5 X 11	Y	Y
3R5134	11 hole VeloBind 20lb. (75gsm)	8.5 X 11	Y	Y
3R5818	44 hole spiral 20lb. (75gsm)	8.5 X 11	Y	Y
3R12163	2 hole short edge 20lb. (75gsm)	8.5 X 11	Y	Y
3R12164	5 hole short edge 20lb. (75gsm)	8.5 X 11	Y	Y
3R12165	5 hole long edge 20lb. (75gsm)	8.5 X 11	Y	Y
	Digital Laser Opaques (94 Brite)			
3R5670	18 lb. (67.5 gsm)	8.5 x 11	Y	Y
3R5672		17 x 11 SG	Y	Y
3R5664	20 lb. (75 gsm)	8.5 x 11	Y	Y
3R5666		17 x 11 SG	Y	Y
3R5667	24 lb. (90 gsm)	8.5 x 11	Y	Y
3R5669		17 X 11 SG	Y	Y
3R5725	28 lb. (105 gsm)	8.5 x 11	Y	Y
3R5673	65 lb. Cover (176 gsm)	8.5 x 11	Y	Y
3R5674		17 X 11 SG	Y	Y
	Image Series			
3R54	Smooth 93 Bright - 20 lb. Watermarked	8.5 x 11	Y	Y
3R1950	Elite 95 Bright - 20 lb. 25% Coton Watermarked	8.5 x 11	Y	Y

	Multipurpose Pastels 20 lb. (75gsm)			
3R11050	**Blue**	8.5 x 11	Y	Y
3R11051	**Green**	8.5 x 11	Y	Y
3R11052	**Pink**	8.5 x 11	Y	Y
3R11053	**Yellow**	8.5 x 11	Y	Y
3R11054	**Buff**	8.5 x 11	Y	Y
3R11055	**Golden Rod**	8.5 x 11	Y	Y
3R11056	**Ivory**	8.5 x 11	Y	Y
3R11057	**Gray**	8.5 x 11	Y	Y
3R11058	**Salmon**	8.5 x 11	Y	Y
3R11061	**Tan**	8.5 x 11	Y	Y
3R11059	**Lilac**	8.5 x 11	Y	Y
3R11060	**Cherry**	8.5 x 11	Y	Y
3R11062	**Blue**	8.5X11 3HD	Y	Y
3R11063	**Green**	8.5X11 3HD	Y	Y
3R11064	**Pink**	8.5X11 3HD	Y	Y
3R11065	**Yellow**	8.5X11 3HD	Y	Y
3R11066	**Buff**	8.5X11 3HD	Y	Y
3R11067	**Golden Rod**	8.5X11 3HD	Y	Y
3R11068	**Ivory**	8.5X11 3HD	Y	Y
3R11069	**Gray**	8.5X11 3HD	Y	Y
3R11070	**Lilac**	8.5X11 3HD	Y	Y
3R11074	**Blue**	8.5X14	Y	Y
3R11075	**Green**	8.5X14	Y	Y
3R11076	**Pink**	8.5X14	Y	Y
3R11077	**Yellow**	8.5X14	Y	Y
3R11078	**Buff**	8.5X14	Y	Y
3R11079	**Golden Rod**	8.5X14	Y	Y
3R11080	**Ivory**	8.5X14	Y	Y
3R11081	**Gray**	8.5X14	Y	Y
3R11084	**Salmon**	8.5X14	Y	Y
3R11085	**Tan**	8.5X14	Y	Y
3R11082	**Lilac**	8.5X14	Y	Y
3R11083	**Cherry**	8.5X14	Y	Y
3R11086	**Blue**	11X17	Y	Y
3R11087	**Green**	11X17	Y	Y
3R11088	**Pink**	11X17	Y	Y
3R11089	**Yellow**	11X17	Y	Y
3R11094	**Buff**	11X17	Y	Y
3R11093	**Golden Rod**	11X17	Y	Y
3R11090	**Ivory**	11X17	Y	Y
3R11091	**Gray**	11X17	Y	Y
3R11092	**Lilac**	11X17	Y	Y
	Pastels Plus - 24 lb. Text (90 gsm) 30% PCW			
3R11631	**Blue**	8.5 x 11	Y	Y
3R11632	**Yellow**	8.5 x 11	Y	Y
3R11634	**Green**	8.5 x 11	Y	Y
3R11636	**Pink**	8.5 x 11	Y	Y
	Pastels - 90 lb. Index (163 gsm) 30% PCW			
3R11618	**Blue**	8.5 x 11	Y	Y
3R11619	**Yellow**	8.5 x 11	Y	Y
3R11622	**Green**	8.5 x 11	Y	Y
3R11621	**Buff**	8.5 x 11	Y	Y
3R11623	**Salmon**	8.5 x 11	Y	Y
3R11624	**Cherry**	8.5 x 11	Y	Y
	Multipurpose Brights 24 lb. (90 gsm) 30% PCW			
3R11640	**Blue**	8.5 x 11	Y	Y
3R11645	**Lime Green**	8.5 x 11	Y	Y
3R11646	**Pink**	8.5 x 11	Y	Y
3R11641	**Yellow**	8.5 x 11	Y	Y
3R11644	**Red**	8.5 x 11	Y	Y
3R11647	**Green**	8.5 x 11	Y	Y
3R11643	**Orange**	8.5 x 11	Y	Y

	65 lb. Cover (176 gsm) 30% PCW			
3R11653	**Blue**	8.5 x 11	**Y**	**Y**
3R11656	**Lime Green**	8.5 x 11	**Y**	**Y**
3R11677	**Pink**	8.5 x 11	**Y**	**Y**
3R11655	**Yellow**	8.5 x 11	**Y**	**Y**
3R11654	**Red**	8.5 x 11	**Y**	**Y**
3R11678	**Green**	8.5 x 11	**Y**	**Y**
3R11694	**Orange**	8.5 x 11	**Y**	**Y**
	Digital Color Products			
3R12063	**DuraPaper** 10mil (163gsm)	8.5 x 11	**Y**	**Y**
3R12064	**DuraPaper** 10mil (163gsm)	8.5 x 11 3HD	**Y**	**Y**
3R12065	**DuraPaper** 10mil (163gsm)	17 x 11	**Y**	**Y**
3R12348	**DocuCard ID Cards** (163 gsm)1-card format	8.5 x 11	**N**	**Y**
3R12406	**Xpressions Document Folder**	18 x 12	**N**	**Y**
3R12407	**Supreme Gloss Document Folder**	18 x 12	**N**	**Y**
3R12310	**PlainTrifold Borchure -** 32 lb. (120gsm)	8.5 x 11	**Y**	**Y**
	Xpressions Tabs			
3R12366	**5-bank Single Reverse Plain**	9 x 11	**Y**	**N**
3R12367	**5-bank Single Reverse 3-Hole**	9 x 11	**Y**	**N**
3R12368	**5-bank Single Straight Plain**	9 x 11	**N**	**Y**
3R12369	**5-bank Single Straight 3-Hole**	9 x 11	**N**	**Y**
	Digital Color Paper - Coated			
	Digital Color Elite Gloss (C2S)			
3R11450	**80 lb. Text (120 gsm)**	8.5 x 11	**N**	**Y**
3R11451		17 x 11 SG	**N**	**Y**
3R11452		18 x 12 SG	**N**	**Y**
3R11454	**100 lb. Text (140 gsm)**	8.5 x 11	**N**	**Y**
3R11455		17 x 11 SG	**N**	**Y**
3R11456		18 x 12 SG	**N**	**Y**
3R11458	**80 lb. Cover (210 gsm)**	8.5 x 11	**N**	**Y**
3R11459		17 x 11 SG	**N**	**Y**
3R11460		18 x 12 SG	**N**	**Y**
	Digital Color Elite Silk (C2S)			
3R11470	**80 lb. Text (120 gsm)**	8.5 x 11	**N**	**Y**
3R11471		17 x 11 SG	**N**	**Y**
3R11472		18 x 12 SG	**N**	**Y**
3R11474	**100 lb. Text (140 gsm)**	8.5 x 11	**N**	**Y**
3R11475		17 x 11 SG	**N**	**Y**
3R11476		18 x 12 SG	**N**	**Y**
3R11478	**80 lb. Cover (210 gsm)**	8.5 x 11	**N**	**Y**
3R11479		17 x 11 SG	**N**	**Y**
3R11480		18 x 12 SG	**N**	**Y**
	Digital Color Supreme Gloss Covers (Coated 1 Side)			
3R11430	**8 Point Gloss (184 gsm)**	8.5 x 11	**N**	**Y**
3R11431		17 x 11 SG	**N**	**Y**
3R11432		18 x 12 SG	**N**	**Y**
3R11434	**10 Point Gloss (210 gsm)**	8.5 x 11	**N**	**N**
3R11435		17 x 11 SG	**N**	**Y**
3R11436		18 x 12 SG	**N**	**Y**
	Digital Color Select Gloss (C2S)			
3R11500	**60lb. Text (90 gsm)**	17 X 11 SG	**N**	**Y,13**
3R11501		18 x 12 SG	**N**	**Y,13**
3R11503	**80lb. Text (120 gsm)**	17x11 SG	**N**	**Y**
3R11504		18x12 SG	**N**	**Y**
3R11510	**100lb. Text (140 gsm)**	17x11 SG	**N**	**Y**
3R11511		18x12 SG	**N**	**Y**
3R11506	**80lb.Cover (210 gsm)**	17x11 SG	**N**	**Y**
3R11507		18x12 SG	**N**	**Y**

Digital Color Papers - Uncoated				
	Digital Color Xpressions + 98 Bright			
3R11540	**24 lb. Text (90 gsm)**	8.5 x 11	Y	Y
3R11541		8.5 x 11 3HD	Y	Y
3R11542		8.5 x 14	Y	Y
3R11543		17 x 11 SG	Y	Y
3R11545	**28 lb. Text (105 gsm)**	8.5 x 11	Y	Y
3R11546		8.5X11 3HD	Y	Y
3R11549		17 x 11 SG	Y	Y
3R11548		18x12 SG	Y	Y
3R11550	**32 lb. Text (120 gsm)**	8.5 x 11	Y	Y
3R11551		17 x 11 SG	Y	Y
3R11552		18 x 12 SG	Y	Y
3R11553	**60 lb. Cover (163 gsm)**	8.5 x 11	Y	Y
3R11554		17 x 11 SG	Y	Y
3R11555		18 x 12 SG	Y	Y
3R11556	**80 lb. Cover (216gsm)**	8.5 x 11	Y	Y
3R11557		17 x 11 SG	Y	Y
3R11558		18 x 12 SG	Y	Y
	Graphic Xpressions Papers & Covers			
	True White 98 Bright			
3R11152	**24# Paper (90 gsm) 20% PCW**	8.5 x 11	Y	Y
3R11153		8.5 x 11 3HD	Y	Y
3R11154		11 x 17	Y	Y
3R5529	**28# Paper (105 gsm) 20% PCW**	8.5 x 11	Y	Y
3R5530		17 x 11 SG	Y	Y
3R5531		18 x 12 SG	Y	Y
3R5533	**65# Cover (163 gsm) 20% PCW**	8.5 x 11	Y	Y
3R5534		17 x 11 SG	Y	Y
3R5535		18 x 12 SG	Y	Y
3R5537	**80# Cover (216 gsm) 20% PCW**	8.5 x 11	Y	Y
3R5538		17 x 11 SG	Y	Y
3R5539		18 x 12 SG	Y	Y
	Cream White			
3R11164	**28# Paper (105 gsm) 30% PCW**	8.5 x 11	Y	Y
3R11168		17 x 11 SG	Y	Y
3R11172		18 x 12 SG	Y	Y
3R11176	**80# Cover (216 gsm) 30% PCW**	8.5 x 11	Y	Y
3R11180		17 x 11 SG	Y	Y
3R11184		18 x 12 SG	Y	Y
	Warm White			
3R11165	**28# Paper (105 gsm) 30% PCW**	8.5 x 11	Y	Y
3R11169		17 x 11 SG	Y	Y
3R11173		18 x 12 SG	Y	Y
3R11177	**80# Cover (216 gsm) 30% PCW**	8.5 x 11	Y	Y
3R11181		17 x 11 SG	Y	Y
3R11185		18 x 12 SG	Y	Y

Product Specifications Overview by Sub-System

The following sections give more detailed descriptions of the capabilities and limitations of each of the major system components.

FreeFlow™ Makeready, Web Services and Process Manager

Version 5.0 SP 4 of FreeFlow™ Makeready, Web Services and Process Manager is available and provides support for Xerox Nuvera® 100/120/144 EA Digital Production System image quality and job ticketing, as well as IQI (Image Quality Interoperability).

Customers with FreeFlow™ applications versions earlier than 5.0 may need to upgrade since SPAR support will not be available.

Early versions of DigiPath (4.0 or below) have not and will not be changed to support the Xerox Nuvera® 100/120/144 EA Digital Production System as a "targeted device." Similarly, DigiPath version 4.1 or FreeFlow™ versions prior to 5.0 will not be changed to support the Nuvera® 100/120/144 EA Digital Production systems as a "targeted device".

DigiPath customers with software releases prior to 4.1 may be provided a "best case" print path utilizing an existing supported printer to optimize image quality.

- When scanning with the "Document Scan and Makeready" application, best Image Quality results will be achieved using "Generic Write White" when submitting from DigiPath.
- When scanning with the "Scan and Print" application, best Image Quality results will be achieved using "DT75/90" when submitting from DigiPath.
- When Image Quality is not a primary concern, select the DT6180 printer when submitting a job for the most comprehensive set of Job Ticket Attributes.

Jobs sent from these DigiPath units will have to be held and re-programmed to ensure correct job attributes.

Solutions Validation

The following software applications have been validated with DocuSP® 5.1.

Connectivity

- BARR Spool
- LRS VPS/TCP/IP

VI

- Elixir Vitesse (VIPP)
- eXstream Dialogue (VIPP & LCDS/Metacode)
- Lytrod Proform Designer (VIPP)
- Atlas PrintShop Mail (VIPP)
- Banta DesignMerge (VIPP)
- Group1 DOC1 (VIPP & Metacode)
- Printable Technologies Datalogics (VIPP)
- Pageflex Persona (VIPP)

- XMPie PersonalEffect Configuration & Workflow (VIPP)
- Press-sense iWay Product Suite VIPP Emitter Module (VIPP)

LCDS

- Elixir DesignPro Tools (LCDS/Metacode Resources)
- RSA EPS Pro
- RSA MISPrint (co-resident on the controller for conversion to PS/PDF)

IPDS

- RSA MISPrint (co-resident on the controller for conversion to PS/PDF)

PDF

- Xerox PDF Color Splitter (Prior users of Colorsplitter who upgrade to 5.0 or above will need a new dot version of Colorsplitter)

Labels

- Xpert Image Xpert Label

VIPP (Variable Data Intelligent PostScript Printware)

FreeFlow™ Variable Information (VI) Suite

The FreeFlow™ VI Software Suite provides a variable data software suite with focus on VIPP (Variable data Intelligent Postscript Printware) - a Xerox technology building on the power of postscript with the goal of a powerful Variable Data solution that can make document creation as simple as just sending the data. Print shop operators and supervisors can also easily print variable data applications in electronic format, as PDF files, with the VI PDF Originator.

Print Speed/System Performance

In general, the Xerox Nuvera® 100/120/144 is capable of efficiently handling variable data jobs. The total time consumed to print a variable data job will vary as a function of variable coverage and element demographics (size and percentage of variable text vs. images/graphics).

Overall, system performance (click-to-clunk) is dependent upon many factors, including the variable data application and workflow, network environment, image quality settings, and RIP and print rates. Under certain circumstances, use of large, high-resolution images printed page-to-page in variable data applications will degrade RIP performance, in some cases to a degree which may affect system throughput.

Variable Information Software Limitations

Note: The following limitations are specific to variable information, which may not be inclusive of the entire system independent of whether a job includes variable data.

FreeFlow™ VI Interpreter

Adobe Portable Document Format (PDF)

PDF cannot be used as a direct input resource for the VI Interpreter. Direct printing of PDF files within a VIPP workflow is not supported. PDF files can be converted to PostScript (using an Adobe compliant driver) and the VIPP Resource Converter or other third party PDF to PostScript converter. PostScript is an input resource supported by the VI Interpreter.

The VI PDF Originator component of the VI Suite can output intelligent, interactive PDF files directly from a VIPP data file. For more information on the capabilities of the VI PDF Originator, contact your Xerox representative.

Support for VIPP may also be obtained by contacting the Variable Information and Solutions Services Group (VISSG). Customers may call (888) 550-6336.

FreeFlow™ Print Manager / IPP

The XDS software has been discontinued. A replacement is FreeFlow™ Print Manager (FFPM), which is a separate, standalone product available for purchase.

Network Connectivity

The Xerox Nuvera® 100/120/144 EA Digital Production System supports industry standard network protocols and Page Description Languages (PDL).

Item	Xerox Nuvera® 100/120/144 EA Digital Production System	Comments
Connections	• Ethernet Interface (10/100 baseT, 1Gb) • S/370 or S/380 Bus and Tag	– Licensed option – Optional connection – Token Ring is not natively supported and requires a bridge box
Network Protocols	• TCP/IP • LPR • IPP • HTTP • Novell (SPX, IPX) • AppleTalk • SNMP	– Protocols available with Ethernet license
Scan to Network Save Protocols	• SMB • FTP • Secure FTP • NFS	–
PDL's	• Adobe PostScript Level 3 • Adobe PDF • PCL 5e & PCL6 • TIFF • Multi-Page TIFF • PPML • LCDS/Metacode • IPDS • ASCII	– LCDS/Metacode and IPDS are not supported on systems configured with an MFF
Document Submission	• Microsoft Windows 95,98,ME, NT4.0, 2000, XP Printer Drivers • Apple Macintosh OS8, OS9, OSX Printer Driver • Sun Microsystems Solaris 2.6, 7.x, 8.x , 9.0 , 10 • Linux 2.x • Xerox FreeFlow™ Print Manager for direct PDL submission from clients • Xerox Web User Interface	– Windows 95, 98, ME and Vista are supported via PPD only. – WHQL (Windows Hardware Quality Lab) certified for the PostScript and PCL 6 drivers. – Drivers are available for download from the Xerox.com web site – Mac OS X Classic Mode supports the drivers and FreeFlow™ Print Manager. – Mac OS X version 10.2.6 and above will support FreeFlow™ Print Manager – Mac OS X version 10.3 and up will support drivers natively in a future software release. – PPD files and FreeFlow™ Print Manager for Solaris and Linux use

Scanner Module

The optional integrated scanner with document handler utilizes a Xerox patented Dual scan head array.

Item	Xerox Nuvera® 100/120/144 EA Digital Production System	Comments
Automatic Document Feeder (ADF)	• 300 sheet capacity (20 lb. bond, 75 gsm) • 5.5" x 8.5" to 11" x 17" sheets (140 x 216 to 279.4 mm x 432m m) • 13 lb. bond to 113 lb. index (49 to 220 gsm)	
Scan Speed	• 120 images per minute one sided 8.5" x 11"/A4 120 sheets per minute • 120 images per minute two sided 8.5" x 11"/A4 60 sheets per minute	
Scan Resolution	• 600 x 600 dpi • 8-bit Gray (256 shades)	– Copy jobs are saved at 1200 x 600 dpi, 1-bit depth – Copy jobs are not intended for output to other printers

Maximum Paper Size & Maximum Image Size

The maximum paper size that can be placed on the platen is 12.6" x 18.5" / 320mm x 470mm. The maximum image size, however, is 12.0" x 18.0" / 305mm x 457mm.

Color

This is not a color scanner.

Scan-to-Email

There is no "scan-to-email" feature for this product.

Input Document substrates

Document substrates that are not recommend for use in the SDDF include envelopes, metallic cover stock, transparencies, label stock, silver photographic paper, tab stock, Never Tear (or other manufacturers' equivalent), and those substrates whose intrinsic characteristics limit or prevent the separation of documents with friction-retard feeding mechanisms without causing mis-feeds, multi-feeds, jams or document damage.

Carbonless paper

Carbonless paper passed through the document feeder may be subject to marking in areas where the document feeder's paper handling elements come in contact with the carbonless stock due to the "marking characteristics" of this stock. In extreme cases, this unintended marking could obscure information from the page being reproduced.

Hole punched paper

The SDDF may not reliably feed GBC and similar type documents without damage to the original and without geometric errors (skew or mis-registration). The workaround for GBC, spiral-bound and similarly punched papers is to rotate the documents to feed the unbound edge first, and then rotate the image.

File Size Limitation

Files saved as Multi-page TIFF are limited to 2GB in size. This limit may be reached after a few hundred images if the scanned originals contain many images and are scanned at 1200 x 1200 resolution.

Scan to Digital

The system is capable of scanning to the hard drive, a NFS mounted drive, any network drive or desktop, or the CD-RW drive. The following resolutions are supported.

Exported Resolution	Halftone Screen Frequency (Photo Mode)	Purpose
1200 x 1200 x 1	125 lpi @ 53°, 106 lpi @ 45°, 85 lpi @ 45°	Xerox Nuvera® 100/120/144 remote printing
1200 x 600 x 1	125 lpi @ 53°, 106 lpi @ 45°, 85 lpi @ 45°	Saving Copy jobs
600 x 600 x 1	125 lpi @ 53°, 106 lpi @ 45°, 85 lpi @ 45°	DocuTech® 61XX printing
400 x 400 x 1	125 lpi @ 53°, 106 lpi @ 45°, 85 lpi @ 45°	Good for some Fax applications
300 x 300 x1	125 lpi @ 53°, 106 lpi @ 45°, 85 lpi @ 45°	Minimal file size

Digital Front End (DFE) - FreeFlow™ DocuSP®

FreeFlow™ DocuSP® Workflow

The workflow is developed around the Xerox FreeFlow™ Document Services Platform (FreeFlow™ DocuSP®) technology, a very stable technology that has been developed over the years and installed in thousands of Xerox devices worldwide. This will allow training simplicity for current FreeFlow™ DocuSP® operators.

The FreeFlow™ DocuSP® controls all aspects of the system – scanning, "ripping," and printing. It is an intuitive, easy-to-use digital front-end driven by the graphical user interface (GUI).

Xerox Nuvera® System Release 8.0 incorporates DocuSP® release 5.1 SP2.

Key features of FreeFlow™ DocuSP® include:

- **Scan/Copy:** scan ahead and program ahead capability; save and job edit capability.
- **Printer Management:** Ability to manage paper supply and printer attributes.
- **Raster** image processing (RIP) services: Supports multiple datastreams; PostScript, PDF, ASCII, PCL, TIFF, PPML, LCDS and IPDS
- **Graphical User Interface:** Provides the user interface to manage various print shop operations; such as setting up and monitoring: queues, jobs management, administering security and accounting features, controlling the production process like the ability to manage paper supply and printer attributes.
- **Disk Overwrite:** This feature is intended for the high security environments that not only want files deleted after use, they want them erased, permanently. This implementation uses algorithms recommended by the Department of Defense (DOD) to ensure complete erasure of all information. The Disk Overwrite feature is based on the current FreeFlow™ DocuSP® data overwrite feature. In addition to data overwrite on FreeFlow™ DocuSP® disk partitioning, the function is also applied to all the other disks in the product including the image disk for copy, and print transient images.
- **DocuTech® Emulation Mode:** This feature will simulate the image quality of the Xerox DocuTech® 61XX product and is useful when a reproduction facility splits a job among more than one output device and requires the appearance of the output from multiple printers to look similar. This feature is also used when reprinting previously saved DocuTech® 61XX family jobs on the Xerox Nuvera®.
- **Security:**

  Transport Layer Security (TLS)/Secure Socket Layer (SSL): When submitting a job from a Web UI, FreeFlow™ Print Manager or the IPP client, invoking this feature will prevent unauthorized interception of the job by encrypting the data sent over the network.

  BAA Authentication: When enabled, this feature requires users to provide a valid username and password before being able to access the Web UI interface.

  IP Filtering: This feature controls the built-in-firewall, allowing the system administrator to restrict network access to the system based on the originating IP address. The restriction applies to the following print submission protocols: LPR, IPP, HTTP, HTTPS, SMB Printing, Raw TCP Printing, FTP.

  Microsoft ADS Authentication: When enabled, a user will be able to authenticate by means of locally managed user accounts as well as possess the ability to log on locally using an account defined in a Microsoft ADS domain.

DVD±RW Drive (Currently, only writing to CDs is supported)

CD-RW/DVD w/black bezel: 48x Record CD-R, 32x Rewrite CD-RW
DVD drive will read DVD-ROM, DVD±R, DVD±R DL, DVD±RW, DVD-RAM

Resource Loading.

There is no floppy drive on Nuvera®; resource loading via LTO Tape or QIC tape is recommended. There are other alternatives, for example, by ftp to the controller, import from Unix file system, or from an NFS mounted directory.

Item	Xerox Nuvera® 100/120/144 EA Digital Production System	Comments
Digital Front End (DFE) and Raster Image Processor (RIP) computing platform	Xerox Document Services Platform (FreeFlow™ DocuSP®) 5.1 for Xerox Nuvera® 100/120/144 with System Release 8.0. • Solaris 10 OS, update 1 • 2.4 GHz, 1 GB RAM, 160GB SATA Hard Drive, DVD-RW Drive, One 10/100/1000 Megabit Ethernet port (RJ45) for customer use, 4 USB v2.0 Ports (2 are used for Keyboard + Mouse), 15" LCD display, USB Keyboard, USB Mouse • Second optional hard drive – 400 GB SATA	Approximately 10 GB of hard drive space available for customer jobs. There is no provision for a second processor.
RIP Resolution	• 600 x 600 dpi • 1200 x 600 dpi • 1200 x 1200 dpi (default)	– The processor can RIP (Raster Image Process pages for printing) at 600 x 600 dpi, 1200 x 600 dpi, or 1200 x 1200 dpi. – Images "ripped" at 600 dpi may provide faster performance when processing, and will save files that are smaller in size, however, there may be some impact to image quality,
Halftone Screens	• 125 lpi @ 53°, 256 levels of gray	– Optimized for the Xerox Nuvera® 100/120/144 EA Digital Production System – Levels of gray @ 1200 x 1200 dpi
Halftone Screens (optional)	• 85 lpi @ 45°, 256 levels of gray • 106 lpi @ 45°, 256 levels of gray • 134 lpi @ 63°, 256 levels of gray • 156 lpi @ 40°, 256 levels of gray	– Optimized for the Xerox Nuvera® 100/120/144 EA Digital Production System – Levels of gray @ 1200 x 1200 dpi
Productivity Pack option	• Multiple Queues • Stock Library	– These capabilities require the Productivity Pack license. Otherwise, the system will only have a single queue and a simplified media list.
Image Quality Controls - Scanning	• Document Type • Lighter/Darker • Contrast • Sharpness • Background Suppression • Pictorial Rendering	– Mixed Text & Graphics; Text; Mixed Text & Halftones; Photo – Eleven positions – Seven positions – Seven positions – On or Off – Halftone selection Rendering textures are error diffusion with the exception of photo mode which is 125 lpi halftone (189 levels of grey)
Image Quality Controls - Printing	• RIP Resolution • Lighter/Darker • Toner Saver	– 600 x 600, 1200 x 600, 1200 x 1200 dpi – Seven positions – For less demanding image quality applications; decreases toner consumption by about 30%

Copy Jobs

- Copy jobs can be saved; they consist of two files - a multi-page TIFF and an XPIF ticket.

Print From Digital File

Configuration	Re-print Job Formats (from DVD/CD)	Comments
Digital Production System	• Single TIFF • Multi-page TIFF • PPML • PCL • PostScript • PDF • Saved Single Page TIFF • ASCII	– Saved Single Page TIFF file is the Save operation performed in FreeFlow™ DocuSP® when selected to save as single TIFF. This file contains PostScript that will require PostScript license to print the file.

Scan to Digital File

Configuration	Save Job Formats	Comments
Digital Production System	• Multi-Page TIFF • PDF • Single Page TIFF	- PDF printing requires PostScript license

Saving jobs

Jobs submitted electronically, either over the network or via media, can be saved.

- Both the “ripped” (Raster Image Processed) image and the job ticket will be saved.
- Ethernet license must be enabled in order to save job as PDF.
- Set up Instructions for Scan To File with NFS (Network File System) can be found in the Xerox Nuvera® Digital Production Systems Hints & Tips.

Productivity Impacts

There are several factors that can affect the performance of the system RIP speed when processing print jobs. The following is a list of common situations that negatively can impact throughput.

- The default print resolution of the system is 1200 dpi. 600 dpi printing may be adequate for your needs, so you can try setting that resolution to improve RIP performance of complex 1200 dpi jobs. 1200 dpi results in 4 times the internal image data of a comparable 600 dpi image that has to be transferred through the system. When the print resolution is changed from 1200 to 600 dpi, the stroke thickening value may also need to be changed from 1 to 0 to avoid excessive line thickening.
- It is common to embed logos and watermarks in submitted print files. These are typically bitmap images that when embedded in a print stream (such as PostScript) can take a long time to process. Note also that resolution selections (e.g. 600 dpi vs. 1200 dpi) can have a significant further impact to processing of these types of embedded images. Consider the design of documents and impacts to printing speed in such cases. There are methods available, through PostScript for example, to cache these embedded images, process them once, and retain them as a resource for application on each page without having to render and scale them for each page. Refer to your PostScript reference manuals and DocuSP® reference manuals for information about caching.

- Submission of multiple TIFF images simultaneously is a common application. There are several batch printing tools available on the market that enable this and most require the selection of a print driver for the target printer that these images files are submitted through. In these cases, the TIFF files are converted to a Printer Description Language (PDL, such as PostScript) by the batch tool by using the printer driver and then submitted to the printer, which in turn RIP that PDL and re-render the TIFF bitmap images back into bitmaps. This is an inefficient process and can significantly slow the machine down. Xerox Nuvera® includes a native TIFF interpreter and it can process TIFF files sent to it directly. Some of the batch tools on the market support a native TIFF submission capability. It may be referred to as a bypass mode or

something similar. If such a capability is available, the Xerox Nuvera®'s performance can be significantly improved by taking advantage of that. (Note that the TIFF interpreter does not automatically determine the embedded image size and apply it to an appropriate paper size. You can accomplish though by using printer and queue defaults programming)

LCDS and IPDS

LCDS Print Description Language

The Xerox LCDS Print Description Language (PDL) is a set of commands that you give to the printing system to define properties such as the appearance, output destination, and paper feed source for your LCDS print job. You can use LCDS PDL to do all of the following in your print jobs:

- Change and mix font types on a page-to-page, line to line, or character-to-character basis. This allows you to customize printed output for specific needs; for example, emphasizing important headings by changing font styles and sizes.
- Change text orientation and positioning on a page-to-page basis. This allows you to print characters along the width or length of the page with equal ease. The printing system can switch instantly, at a page boundary, between portrait (tall and narrow) and landscape (wide) page formats, combining the two styles within a single report.
- Print a number of previously separate logical pages on the same physical page of a document.
- Modify documents on a page to page basis by using copy modification entries (CME's) to replace selected portions of text with other data, change fonts, or label copies, e.g. as "confidential."
- Merge variable print data with forms stored on the system disk. This feature eliminates the need for forms overlays and most preprinted forms, as well as assuring perfect registration.
- Print two different forms back to back (duplex) on one sheet of paper, thereby reducing paper costs. Additionally, this option offers potential savings in inventory, filing, storage, and mailing costs for computer generated material.
- Feed paper either short edge first or long edge first to accommodate a variety of paper sizes.

The following are known key limitations specific to LCDS on Nuvera® DPS systems. A more complete set is provided in the Nuvera® Hints and Tips document.

- Print on Edge (versus print to edge) is not supported.
- There is no floppy drive on Nuvera®; resource loading via LTO Tape or **QIC** tape is recommended. Alternatively, resources can be sent over the network by ftp to the controller (or a UNIX file system) and imported from the file system to DocuSP®. Importing from a NFS mounted directory can also be performed if the resources are already relocated to that directory.
- The TMODE command is ignored as the system always performs at optimum throughput.

Please refer to the following documentation for additional information

- Using LCDS Page Description Language – Generic 701P42242
- LPS Migration Guide. Request copy of Migration Guides from your Xerox Systems Analyst.

IPDS Print Description Language

The DocuSP® IPDS gateway supports the Intelligent Printer Data Stream as defined by IBM. The IPDS DataStream performs printer control functions as well as sharing job status information back to the host. It is configured by means of a GUI, featuring drop-down menus, tabs, and icons from which to manage the DocuSP® IPDS functions. DocuSP® IPDS supports the TCP/IP and online channel interfaces.

The following are known key caveats specific to IPDS on Nuvera® DPS systems. A full set of caveats and limitations are provided in the Nuvera® Hints and Tips document.

- DocuSP® IPDS currently supports the following environments only:
  - MVS with PSF
  - OS/400 with PSF/400 (TCP/IP connectivity only)
  - AIX with InfoPrint Manager
  - InfoPrint Manager / Windows
  - Emtex VIP

  Even in these opened environments, application validation is a requirement prior to installation. Other host types and 3rd party solutions are under evaluation and will be become available as validations are completed.
- Sample current job is not supported for IPDS jobs. The IPDS host presumes full control over the job's output, and this feature would cause incorrect page counts to be reported to the host. The DocuSP® GUI currently only supports this capability at the Printer Manager level, and is not able to set this capability for individual jobs or queues. Therefore, the DocuSP® GUI does not prevent selecting Sample Current Job. However, the request will not be honored for an IPDS job, and no warning message will be provided.
- DocuPrint IPS 7.x Input Groups and 8.x Virtual Printer Media Lists cannot be imported into DocuSP® IPDS. DocuSP® IPDS Job Setups must be recreated.
- The IPS Manager is not automatically informed when physical tray contents are changed at the DocuSP® printer manager. Instead, you must use the Refresh mechanism provided by the IPDS Tray/Bin Mappings dialog to display the latest mapping information.
- DocuSP® Remote Workflow (DRW) does not support the IPS Manager.
- IPDS jobs cannot be deleted or canceled from the DocuSP® Job Manager GUI. Instead, it is necessary to cancel the current IPDS job using the "Cancel Incoming Job" button on the IPS Manager GUI. Note that this action is made easier now with the 'Restart IPDS Processing' option (a DocuSP® restart is no longer required).
- Margins settings with positioning of data on the page can be adjusted at the media level. This is accomplished by using the comment field for the stock. The values are only applicable to IPDS.

- Please refer to the IPDS User Guide (701P44135, July 2005) for additional information on the support of IPDS.

Sheet Feed Modules

Item	Xerox Nuvera® 100/120/144 EA Digital Production System	
	Sheet Feed Module (SFM) 4 Tray	**Large Format Sheet Feed Module (LFSFM) 2 Tray**
Capacity 20 lb bond (75 gsm)	• Paper Input Capacity: 5800 sheets --Tray 1: 1,600 sheets --Tray 2: 3,100 sheets --Trays 3 & 4: 550 sheets each	• Paper Input Capacity: 3200 sheets --Trays 1 & 2: 1,600 sheets
Capacity 80gsm, 0.105 mm	• Paper Input Capacity: 5565 sheets --Tray 1: 1505 sheets --Tray 2: 3020 sheets --Trays 3 & 4: 520 sheets each	• Paper Input Capacity: 3030 sheets --Trays 1 & 2: 1505 sheets
Minimum Size	• Trays 1 & 2 --Feed Direction: 5.5 inches (140 mm) --Across Feed Direction: 8.0 inches (203 mm) • Trays 3 & 4 --Feed Direction: 7.17 inches (182 mm) --Across Feed Direction: 8.0 inches (203 mm)	• Trays 1 & 2 --Feed Direction: 7.17 inches (182 mm) --Across Feed Direction: 8.0 inches (203 mm)
Maximum Size	• Trays 1 & 2 --Feed Direction: 9.0 inches (229 mm) --Across Feed Direction: 12.6 inches (320 mm) • Trays 3 & 4 -- Feed Direction: 18.5 inches (470 mm) --Across Feed Direction: 12.6 inches (320 mm)	• Trays 1 & 2 -- Feed Direction: 18.5 inches (470 mm) --Across Feed Direction: 12.6 inches (320 mm)
Media Types (MFF Config.)	• Bond, Bristol, cover, index, offset, recycled, vellum, tabs and Mylar tabs, transparencies, carbonless, labels, Never-Tear, pre-printed forms • Booklet envelopes: 6" x 9", 7" x 10", 162mm x 229mm (C5), 178mm x 254mm • Catalog envelopes: 6" x 9", 7" x 10", 162mm x 229mm (C5), 178mm x 254mm	
Media Types (BFM / FTM Config.)	• Bond, Bristol, cover, index, offset, recycled, vellum, tabs and Mylar tabs, transparencies, carbonless, labels, Never-Tear, pre-printed forms • Booklet envelopes: 9" x 12", 228mm x 305 mm , Catalog envelopes: 7" x 10", 178mm x 254mm	
Input Weight (MFF Config.)	• Uncoated: 16 lb bond to 120 lb index (56 gsm to 220 gsm) • Does not support coated stocks – image quality and performance (jams) maybe degraded	
Input Weight (BFM / FTM Config.)	• Uncoated: 16 lb bond to 90 lb cover (56 gsm to 250 gsm) • Coated: 90gsm to 250gsm	
Feeding System	• Air shuttle	• Air shuttle

COMMENTS

- Auto tray switching & Load while run capability are supported. Do not open trays when the "Drawer in Use" light is lit.
- Statement tabs and A5 tabs are not supported on configurations with the BFM or FTM devices. On configurations using the MFF, Statement tabs can only be output to the Top Tray in the finisher; they cannot be output to the Main Stacker.
- For configurations with the MFF: Booklet Envelopes should be fed with flaps closed and on long edge, flap side down; Catalog Envelopes should be fed with flaps open, towards operator, with glue side down.
- Paper handling reliability of coated papers is reduced below 120 gsm.
- Trays do not feed to empty. When a feeder empty message is displayed, there could be as much as 80 sheets of stock remaining in the feeder tray (based on 20lb. bond / 75 gsm). This is to maintain the best possible reliability in the feeder mechanisms.
- The use of Xerox media as listed in this document is recommended. Because there is a difference in technology between offset and digital printing, there is a difference in media properties required for optimum

performance with each technology. Xerox papers and specialty media are digitally optimized (paper specs - smoothness, formation, electrical properties, etc., for optimal image quality, toner adhesion and performance, and also precision sheeted - less contamination, better registration for use in Xerox digital equipment.

- Two feed modules in tandem may be installed on the input side of the printer.

SPECIAL STOCKS

4-Tray SFM

Carbonless

Xerox Carbonless Papers as listed in this document are the only recommended carbonless media. Only simplex printing is supported on this stock type. Running carbonless paper may require additional cleaning time by the CSE during service of the machine. This time will vary based on the percentage of carbonless stock run. In the 100% carbonless usage case, service time could be up to 60 additional minutes per service call at 150,000 prints

DocuCards®

DocuCards® can only be loaded 100 at a time in a tray. Nuvera® feeder trays feed until almost empty but not until empty, leaving 20~40 sheets remaining. When running DocuCards®, frequent reloading of the feeder trays will be required.
DocuCards® can only be run to the Top Tray of the finisher. Some mis-stacking may occur as the DocuCards® catch on the edges of the stacked sheets®.
When using DocuCards, it is recommended that you use a Tiltatron (available from CAS).

2-Tray LFSFM

Reinforced stocks

Reinforced stocks such as Mylar tabs should be limited to 90 loaded in a tray at one time.

Transparencies

The tray capacity for removable stripe transparencies is 90 sheets. There is no constraint for feeding painted striped transparencies or stripeless transparencies.

Tab Jobs

Running tabs requires proper use of the supplied Tab Guides.
For configurations with the BFM or FTM, jobs should be run with straight collated tabs. For configurations with the MFF, jobs must be run with reverse collated tabs (the number of segments should be 10 or less). For the MFF configurations, please also refer to the Crucial Performance Expectations section for comments on 'Drilled Paper and Tab jobs'.
Tab stock sizes supported are: Letter, 9" x 11," 9.5" x 11", A4

Envelopes

Envelopes should be limited to 60 loaded in a tray at one time. Nuvera® feeder trays feed until almost empty but not until empty, leaving 20~40 sheets remaining. When running envelopes frequent reloading of the feeder trays will be required.
Very slight wrinkles (1/2 inch long) may occur on the trail edge of envelopes at the corners.
Due to the nature of feeding envelopes with flap open, some mis-stacking may occur in the top tray as the envelopes catch on the open flaps
Envelopes should be sent to the Top Tray only. For the MFF configurations, the maximum limit is 15.

Inserter Module (IM)

One inserter may be installed on the output side of the printer. Either the 4-tray SFM or the 2-tray Large Format SFM can be used as an inserter. The specifications for the Insertion Module are the same as for the SFMs, except as noted in the table below, for the configuration when an insertion module is used with the Multifunction Finisher:

Item	Insertion Module used with the Multifunction Finisher	Comments
Input Sizes	• Trays 1 & 2 (SFM): 7" x 10" to 9" x 12.6" (178mm x 254mm to 228.6mm x 320mm) • Trays 1 & 2 (LFSFM): 7.17" x 10" to 12.6" x 18.5" (182.1mm x 254mm to 320mm x 469.9mm) • Trays 3 & 4 (available on SFM only): 7.17" x 10.0" to 12.6" x 18.5" (182.1mm x 254mm to 320mm x 469.9mm)	– A5 and Statement cannot be fed from any of the trays in the Insertion Module. – Tabs cannot be fed from the Insertion Module to the MFF Finisher (tabs orientation incompatibility between the IM and the MFF).

COMMENTS

- LCDS and IPDS applications are currently not able to pull paper stocks from the Insertion Module.

Printer Module

Xerographic monochrome (black and white) print engine. The printer utilizes a Discharged Area Development (DAD) system, often referred to as "write black."

Engine speed per paper size – impressions per minute*				
Paper dimensions along process direction	**Example sizes**	**Xerox Nuvera® 144 EA DPS**	**Xerox Nuvera® 120 EA DPS**	**Xerox Nuvera® 100 EA DPS**
5.5" ≤ Paper Size ≤ 8.5" (140mm ≤ Paper Size ≤ 216 mm	Letter 8.5"x11", A4, Statement 5.5"x8.5", A5, 6"x9", 7"x10", 8"x10"	144 IPM	120 IPM	100 IPM
8.5" < Paper Size ≤ 9.0" (216 mm < Paper Size ≤ 229 mm)	9"x11" Covers, 9"x12", Letter sized Tabs, A4 Tabs	120 IPM	120 IPM	100 IPM
9.0" < Paper Size ≤ 11.7" (229mm < Paper Size ≤ 297 mm)	Letter SEF, A4 SEF, 9.25"x12.5", 9.5"x12.5"	96 IPM	96 IPM	80 IPM
11.7" < Paper Size ≤ 17.0" (297mm < Paper Size ≤ 432 mm)	8.5"x14", Ledger 11"x17", A3	72 IPM	72 IPM	60 IPM
17.0" < Paper Size ≤ 18.5" (432 mm < Paper Size ≤ 470 mm)	12.5"x18.5"	48 IPM	48 IPM	40 IPM

* - The impressions per minute figures are for the Printer Module; system throughput could be further constrained by the capabilities of the attached Finishing Module(s); please refer to the documentation for the individual Finishing Module(s).

Item	Xerox Nuvera® 100/120/144 EA Digital Production System	Comments
Image Format	Maximum image area - 12.6" x 18.5" (320mm x 470mm)	• All sheets will have a default 3 mm (0.12 in.) border without printing, regardless of sheet size. • **Default border can be set to 0 mm, or Lead Edge Erase only by the SA; however some image quality degradation may occur up to 6mm from the edge.**
Media size	Process Direction: 5.5 – 18.5" (140 – 470 mm) Cross Process: 8.0 – 12.6" (203 – 320 mm)	
Media Weight	Uncoated: 16 lb. bond – 90 lb. cover (56 – 250 gsm) Coated: 60 lb text – 90 lb cover (90 – 250 gsm)	Coated stocks and heavyweight stocks (>220 gsm) are not supported on configurations using an MFF
Printer Resolution	4800 x 600 dpi	No matter what resolution images are "ripped" at, the printer uses hardware image processing to print them at 4800 x 600 dpi.
Fuser	374° F (190° C) – while printing	Users may select enhanced permanence for

Temperature		heavyweight paper by means of the User Interface.
Developer	Carrier: 35 microns; Toner: 6 microns	Trickle development system
Registration	Translating Electronic Registration	Benchmark registration system holds image to sheet alignment at +/- .65mm per side AND front-to-back on Letter/A4 size papers; +/- .75mm per side AND front-to-back on Tabloid/A3 size papers.

Image Quality Expectations

Image Quality Parameter	Xerox Nuvera® 100/120/144 EA Digital Production System	Comment
Image Uniformity	The Xerox Nuvera® 100/120/144 EA Digital Production System is designed to render tints with a high degree of uniformity, and produce vignettes, sweeps and gradients that are smooth and even. Sophisticated design prevents unwanted process speed variations that plague lesser digital printing systems with banding problems. Halftoning algorithms and customized halftone dot designs take full advantage of the printer's high addressability imaging system to render incredibly sharp, detailed images.	The most discriminating judges of print quality may occasionally perceive a degree of mottle in large uniform flat tints. Extremely high humidity, low document area coverage or papers with poor formation can exacerbate mottle. If excellent uniformity is required, controlling environmental factors or an accelerated maintenance rate can usually satisfy demanding customers.
Text Quality	Black text quality is excellent for sizes as small as 4 point.	
Line Quality	The Xerox Nuvera® 100/120/144 EA Digital Production System can print solid lines all the way down to 70 microns.	
Area Coverage	The Xerox Nuvera® 100/120/144 EA Digital Production System uses nested automated controls of dry ink, development, tone reproduction, and the internal environment to assure consistent printing. These closed loop process controls continuously test against the targets and adjust as required.	The control system is designed to run within a specific range of quality. Although some variation may be noticeable in specific cases, the closed loop controls will typically deliver very acceptable quality, consistently, predictably, and without operator intervention.
Mylar tabs	Images printed on Mylar tabs typically show degradation due to toner scatter.	
Other artifacts	As with any printing process, artifacts will occur on the Xerox Nuvera® 100/120/144 EA Digital Production System. These include streaks, mottle, banding, spots and edge deletions. For most jobs and clients, the expected level of artifacts is within the normal operational and component quality ranges of the system and will not affect the acceptability of the job.	Maintenance procedures are available to mitigate these artifacts. Artifact-sensitive jobs should be monitored. Using stocks on the Recommended Media List and maintaining your environment will also help to minimize the occurrence of these artifacts.

Printer Module Capabilities

- **Print to Edge**
  This is not a print to edge system due to potential image quality defects on the edge of the page. The system default is set to 3 mm border erase. The border erase can be set to 0 mm, but the printer is subject to image quality limitations - which may be acceptable for some applications. Some non-standard and custom paper sizes may have a larger border region where image quality cannot be optimized.
- **SRA3 Printing**
  Printing on SRA3 can result in inboard and outboard edge image quality defects. The defects can range from slight mottle to high contrast deletions depending on the type and condition of the substrate being printed on. The reason for this is that the Transfer Assist Blade does not completely extend to the edges of SRA3 substrates. The blade does not make contact with the last 14mm at both the inboard and outboard edges of SRA3 substrates.
- **Area Coverage**
  The system is capable of continuous printing of pages up to 25% area coverage. When documents that exceed 25% area coverage per page are continuously printed, the customer may notice that the system does not print at the rated speed.
- **Xerographic Color Prints**
  Xerographic color originals cannot be run through the fuser.

Multifunction Finisher: Professional and Pro Plus

Two configurations are offered – Professional and Pro Plus (available on the 100 & 120 ppm configurations only)

Professional Finisher

Top Tray / Offset Stacker / Stapler / Booklet Maker / Z-fold / C-fold

- Envelopes and Statement size paper (5.5" x 8.5") will be delivered only to the top tray.
- Staple locations for non-standard size papers (e.g., standard sizes are A4, Letter size, etc.) will be slightly asymmetrical. The staple will be located in the position appropriate for the next nearest standard paper size.
- Certain stocks (stocks with high clay content and / or composed of other high density materials) may reduce the number of sheets that can be stapled and / or result in miss-staples.
- Imposition at the printer requires the optional Imposition feature license

Sub-system	Feature	Comments
Top Tray	250 sheet capacity (20 lb. bond) 5.5" x 8.0" to 12.8" x 18.5"	
Main Stacker	2000 sheet capacity 5.83" x 8.0" to 12.8" x 18.5"	• Output is normally delivered 1-n, face down to the main tray; jobs can be programmed for face up delivery if desired but stapling position & orientation will not be optimal • The system will cycle down when the stacker is full; overflow will not go to the top tray • Sizes can be mixed in the stacker, however mixed size stacks should be closely monitored to ensure stack stability • The maximum stack size capability is degraded for thin stapled sets.
Stapler	• Staples up to 100 sheets 20 lb. bond of paper sized 8.5" x 14" or less with 100 sheet staple cartridge loaded. With 11" x 17" / A3 20 lb. Bond paper, up to 50 sheets can be stapled. • Staples up to 50 sheets 20 lb. bond paper sized 11" x 17" / A3 or less with 50 sheet staple cartridge loaded • One or Two Staples	• The number of sheets that can be stapled will decrease in relationship to the weight of the paper. • Does not staple tabs or transparencies • The staple placement on the page is shown on the controller
Booklet maker	• C – fold 1 sheet Letter and A4 sizes • Z – fold 1 sheet Letter and A4 sizes • Bi – fold 5 sheet capacity (20 lb. stock), Letter (8.5" x 11"), A4, Foolscap (8.5" x 13"), Legal (8.5" x 14"), Ledger (11" x 17") and A3 sizes. • Booklets – Dual Staple 15 sheet capacity (20 lb. stock), Letter (8.5" x 11"), A4, Foolscap (8.5" x 13"), Legal (8.5" x 14"), Ledger (11" x 17") and A3 sizes.	• C - fold and Z- fold weight range is 16 to 32 lb. (60 to 120 gsm) • Bi-fold & Booklet sheet capability is reduced with heavier stocks • No face trim • No Engineering folder • No hole punch

Other 100-sheet stapler cartridge typical minimum capabilities:
- 70 sheets for 28lb (105 gsm) of paper sized 8.5" x 14 or less
- 30 sheets for 80lb cover (216gsm), all paper sizes
- 20 sheets for 28lb (105gsm) Color Expressions and equivalent papers, all paper sizes

Other 50-sheet stapler cartridge typical minimum capabilities:
- 35 sheets for 28lb (105 gsm), all paper sizes (including CX and equivalent papers)
- 15 sheets for 80lb cover (216gsm), all paper sizes
- 20 sheets for 28lb (105gsm) Color Expressions and equivalent papers

Staple Cartridge Limitation: The machine software does not distinguish between the 50 sheet staple cartridge and the 100 sheet staple cartridge. This means that if the 50 sheet staple cartridge is loaded in the machine, and a job with more than 50 sheets is sent to be stapled, a mis-staple or stapler jam will probably occur. If the 50 sheet staple cartridge is used, it is the responsibility of the operator to ensure that jobs exceeding 50 sheets are not submitted for stapling.

This product is not DFA compatible.

Booklet Maker Note: When using the booklet maker, some pre-printed cover sheets may exhibit tear-off from the stapled booklet, depending on the pre-printed ink area coverage and ink type. It is advisable to verify your application prior to production.

Pro Plus Finisher

Includes capabilities above plus Hole Punch capabilities as well as Insertion Tray capability

Top Tray / Offset Stacker / Stapler / Booklet Maker / Z-fold / C-fold: same capabilities and limitations as above

Sub-system	Feature	Comments
Insertion Tray	200 sheet capacity (20 lb. Bond, 75gsm) 6.93" x 8.0" to 11.73" x 18.5" 176 x 203 mm to 298 x 470 mm	• Inserts can be delivered to the top tray, main tray, or the booklet maker • Tabs must be forward collated, and should be loaded with the tab edge leading • Mixed size media are not supported
Hole Punch	2 / 3 (standard), or 2 / 4 (optional) hole punching for North American markets 2 / 4 (standard), or 2 / 3 (optional) hole punching for European markets • 2-hole punch for stock size ranges: 5.83" x 8.0" to 12.64" x 18.0" 148 x 203 mm to 321 x 457mm • 3-hole punch for stock size ranges: 5.83" x 9.13" to 12.64" x 18.0" 148 x 232 mm to 321 x 457mm • 4-hole punch for stock size ranges: 5.83" x 10.04" to 12.64" x 18.0" 148 x 255 mm to 321 x 457mm Punched sheets Chad Bin capacity is 15,000	• Punched sheets can be delivered to the top tray or the main tray • The upper limit of media weight that can be punched is 110 lb. Bond (200 gsm) • Punching should not be used on Transparencies, Labels and Synthetic or Modified media. • 4-hole punching on letter and ledger (11"/279mm cross-process length) media should not be used in conjunction with single stapling (staple will overlap the punched hole). • The 2 / 4 hole punching has all holes equally spaced, with 80mm between holes (7mm dia.). This is not a Swedish 4 hole punch configuration; currently we do not support that configuration.

Stack Quality

The maximum stack scatter is 25.0 mm or less for:

- Unstapled sets
- Stapled sets greater than 20 sheets

The maximum stack scatter is 60.0 mm or less for:

- Stapled sets less than or equal to 20 sheets
- Stack size maybe limited for stapled sets less than or equal to 20 sheets

Within Set Registration

See Tables 1 & 2 for specification, below. Figure 1 details the correct measurement technique

Other Notes on MFF:

- The SEM is not available with this finisher
- This finisher is not DFA compatible

MFF Professional

MFF Pro Plus

Figure 1

TOP VIEW (Main Tray & Top Tray)

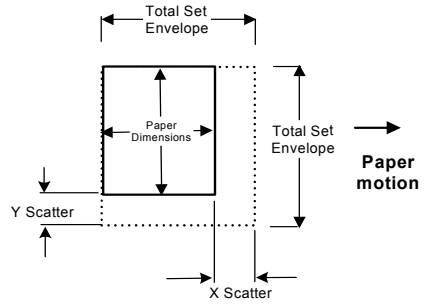


Table 1 (See Figure 1)
Unstapled Sets: Within Set Specifications

	Paper quality	Size / Weight	Relative Humidity (%)	95% of Sets X (mm)	95% of Sets Y (mm)
Main Tray	Xerox recommended	8.5" x 11" (A4), 20 lb (80 gsm)	21 - 65	6	13
	Fair to good	All sizes & weights, 1-20 sheets per set	10 - 90	10	20
	Fair to good	All sizes & weights, >20 sheets per set	10 - 90	20	20
Top Tray	Xerox recommended	8.5" x 11" (A4), 20 lb. (80 gsm)	21 - 65	19	40
	Fair to good	All sizes & weights	10 - 90	Job integrity maintained	

Table 2 (See Figure 1)
Stapled Sets: "Within Set" Specifications

Main tray paper quality	Relative Humidity (%)	95% of Sets X (mm)	95% of Sets Y (mm)
Single Staple			
Xerox recommended [20 lb (80gsm)]	21 - 65	1.5	1.5
Fair to good	10 - 90	3.0	3.0
2-sheet LEF Single Staple			
Xerox recommended [20 lb (80gsm)]	21 - 65	1.8	1.8
Fair to good	10 - 90	3.0	3.0
Dual Staple			
Xerox recommended [20 lb (80gsm)]	21 - 65	2.0	2.0
Fair to good	10 - 90	3.0	3.0

System Productivity: Xerox Nuvera® 100/120 EA DPS with the Multifunction Finisher

Output to Top Tray

30 page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera® 100 Single-sided sheets printed per minute	Nuvera® 100 Double-sided sheets printed per minute	Nuvera® 120 Single-sided sheets printed per minute	Nuvera® 120 Double-sided sheets printed per minute
8.5" x 11"	100	50	120	60
8.5" x 14" **	60	30	72	36
11" x 17"	60	30	72	36

** 8.5" x 14" paper feeds "Short-edge" as defined in the system.

Output to Main Stacker - Unstapled

30 page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera® 100 Single-sided sheets printed per minute	Nuvera® 100 Double-sided sheets printed per minute	Nuvera® 120 Single-sided sheets printed per minute	Nuvera® 120 Double-sided sheets printed per minute
8.5" x 11"	100	50	120	60
8.5" x 14" **	49	26	65	34
11" x 17"	49	26	65	34

** 8.5" x 14" paper feeds "Short-edge" as defined in the system.

Output to Main Stacker – Single staple

30 page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera® 100 Single-sided sheets printed per minute	Nuvera® 100 Double-sided sheets printed per minute	Nuvera® 120 Single-sided sheets printed per minute	Nuvera® 120 Double-sided sheets printed per minute
8.5" x 11"	97	48	116	58
8.5" x 14" **	51	27	67	35
11" x 17"	51	27	67	35

** 8.5" x 14" paper feeds "Short-edge" as defined in the system.

Output to Main Stacker – Double Staple

30 page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera® 100 Single-sided sheets printed per minute	Nuvera® 100 Double-sided sheets printed per minute	Nuvera® 120 Single-sided sheets printed per minute	Nuvera® 120 Double-sided sheets printed per minute
8.5" x 11" LEF	91	47	109	56
8.5" x 14" **	48	26	63	35
11" x 17"	48	26	63	35

** 8.5" x 14" paper feeds "Short-edge" as defined in the system.

Output to Fold Tray – C Fold, Z Fold, Bi-Fold

One page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera® 100 Single-sided sheets printed per minute	Nuvera® 100 Double-sided sheets printed per minute
8.5" x 11"	13 C or Z (for Bi-fold, 23 ppm)	13 C or Z (for Bi-fold, 47 ppm)
8.5" x 14" **	8 (Bi-fold only, 17 ppm)	8 (Bi-fold only, 33 ppm)
11" x 17"	8 (Bi-fold only, 17 ppm)	8 (Bi-fold only, 33 ppm)

**Paper fed "Short-edge" as defined in the system.

One page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera® 120 Single-sided sheets printed per minute	Nuvera® 120 Double-sided sheets printed per minute
8.5" x 11"	16 C or Z (14 for Bi-fold, 28 ppm)	16 C or Z (14 for Bi-fold, 56 ppm)
8.5" x 14" **	10 (Bi-fold only, 20 ppm)	10 (Bi-fold only, 40 ppm)
11" x 17"	10 (Bi-fold only, 20 ppm)	10 (Bi-fold only, 40 ppm)

**Paper fed "Short-edge" as defined in the system.

Productivity for different paper sizes: Output to Fold Tray - Booklets

(Including 2 sheet Bi-fold)

Paper Size	Nuvera® 100 2 Sheet Books per minute (booklet pages per minute)	Nuvera® 100 8 Sheet Books per minute (booklet pages per minute)	Nuvera® 100 15 Sheet books per minute (booklet pages per minute)
8.5" x 11"	10 (80)	3.3 (107)	2.2 (133)
8.5" x 14" **	7.5 (60)	2.7 (88)	1.6 (88)
11" x 17"	7.5 (80)	2.7 (88)	1.6 (88)

**Paper fed "Short-edge" as defined in the system.

(Including 2 sheet Bi-fold)

Paper Size	Nuvera® 120 2 Sheet Books per minute (booklet pages per minute)	Nuvera® 120 8 Sheet Books per minute (booklet pages per minute)	Nuvera® 120 15 Sheet books per minute (booklet pages per minute)
8.5" x 11"	12 (96)	4.0 (128)	2.7 (160)
8.5" x 14" **	9 (72)	3.3 (105)	1.8 (105)
11" x 17"	9 (72)	3.3 (105)	1.8 (105)

**Paper fed "Short-edge" as defined in the system.

Basic Finishing Module (BFM) and BFM Plus

Dimensions	Basic Finishing Module (BFM)
Width X Depth X Height	32.9" X 28" X 44.5" (835.7mm X 711.2mm X 1130.3mm)
Weight	369 lbs. (167.4 kg)
Clearance: Operator	Minimum 38" in front of module
Clearance: Service	Minimum 30" from back wall
Dimensions	**Basic Finishing Module Plus (BFM Plus)**
Width X Depth X Height	48" X 28" X 44.5" (1220mm X 711.2mm X 1130.3mm)
Weight	494 lbs. (167.4 kg)
Clearance: Operator	Minimum 38" in front of module
Clearance: Service	Minimum 30" from back wall

BFM

BFM Plus

Electrical & Environmental	BFM / BFM Plus	
	Minimum	Maximum
Temperature Range	50° F (10° C)	90° F (32.2° C)
Humidity Range	15% RH	85% RH
Altitude	0 ft	10,000 ft. (3048m)
Power	200 - 240 VAC ± 10%, 50/ 60 Hz, 8Amps	

Media Latitude	BFM / BFM Plus
Stock Weight Range	Uncoated: 16lb. bond to 120lb. index (56 to 250 gsm) Coated: (90 to 250gsm)
Stock Size Range	7" x 8" to 12" x 18.5" (178 x 203mm to 320mm x 470mm) – See table on following pages
Top Tray Capacity	250 (20 lb. bond / 75 gsm)
Main Stacker	3000 (20 lb. bond / 75 gsm)
Stapler	One or two staples, up to 100 sheets (20 lb. bond / 75 gsm)

System Compatibility

There are two models: the BFM has a top tray (also know as purge tray); the BFM Plus includes a bypass transport over the stacker

Both the BFM and the BFM Plus may be installed to enable continuous running with unload-while-run.

If one of these modules is the only installed finisher, it must be BFM (with the top tray).

1 or 2 BFM Plus'es may be installed to connect to a downstream FTM to add supported inline DFA finishing.

BFM / BFM Plus Operation

Continuous operation with unload while run is fully supported with a BFM and BFM Plus installation. When a stacker is full or not ready (e.g. out of staples) the system can auto switch to another available stacker. Unloads can be configured to occur automatically at stacker limit, at job boundaries, at set or partition boundaries, or can be initiated manually via the Stacker Unload button or the GUI. A stacker's limit can be configured to any value between 200 and 3000 and each BFM stacker can be configured independently and differently. If desired, operators can also program jobs to specific stacker destinations.

Bypass via BFM Plus

Bypass to a downstream finishing device is a capability of the BFM Plus

Output

- Paper sizes supported to the main tray (stapled and unstapled)**:**
  Process direction - 7.0 to 18.5 in. (178 mm to 470 mm)
  Cross Process direction - 8.0 to 12 in. (203 mm to 305 mm)
- Smaller sizes (down to A5 and Statement) or larger sizes (including SRA3) can be run to the top tray.
- Mixed sized output allows stacking of different size pages, both in the process and cross-process direction, in a single job.
- When stapling sets with mixed size stock, the stock must be the same dimension in the Across Feed direction, and the dimension differences should be within 13mm (½") in the feed direction.
- To have the BFM staple correctly, the output must be 1-N facedown.
- Envelopes can only be sent open flap trailing to the Top Tray, and should be limited to 15, or mis-stacking may occur.
- The BFM / BFM Plus does not offset paper sizes larger than 11"x17" / A3. This means that 12"x18" or 12x18.5" cannot be offset. For these sizes, the software ignores any offset programming selection, and runs without offsetting.
- Banner and slip sheets should be greater than or equal to 90 gsm (24 lb bond)
- Slip-sheets must be the same size as the body sheets
- Stapler capacity is reduced for coated papers and paper heavier than 20 lb. bond (75 gsm).
- For reliable stacking, stack size should be limited for certain jobs:
  --Offset single sheet jobs should be limited to 100 sheets. (20 lb bond or 75 gsm)
  --Stapled sets of 15 sheets or smaller are limited by machine control to 100 sets.
  --Stapled sets of coated stocks stack less well, and should be managed to 50 by the operator.
  --Stapled sets should be offset stacked.
  --The stack height limitation can be operator adjusted.
- Automatic bin limits control the number of sheets collected and compiled in the finisher when running unfinished sets to optimize the set drop performance and improve job recovery.

Tabs

The tabs cross process length must be the same as the body of the document. The tab can be no longer than 0.5" (13mm) in the process direction beyond the body of the document. Tabs sized for use with 8.5" x 11" and A4 stock, long edge feed, are supported

Transparencies

Transparencies run to the stacker must have a slip-sheet between each one.

Stapling

- The BFM is delivered with a 5000 staple cartridge of 100-sheet staples installed in each of the two staplers.
- Staples for up to 30 sheets and for up to 100 sheets are available. Stapled jobs over 100 sheets are inhibited. The machine does not detect staple size. The operator must manage jobs to be within capability of the loaded staple size.
- Some marking of the staple onto an adjacent set may be seen.
- Not all stapler failure modes are detected by the machine logic. The customer may find some occurrence of unstapled sets in the output.

Carbonless

- In the DPS BFM configuration, curl that faces up poses more of a problem than curl that faces down. To avoid up curl, 2, 3 and 4 part Carbonless should be run to the BFM in an N to1 mode and use reverse collated versions of the recommended Xerox media. See compatible media tables in this document.

Additional notes related to DocuPrint migration

The BFM is a set-level device. It is designed to collect sheets into set-sized chunks (using the compiling station), optionally staple and/or offset the chunks, and then place those on to the stack below. It can reliably stack unfinished output, and it supports unloading and auto-switching to another available BFM Stacker; however, the following should be noted:

- Since it is a set-level device, boundaries between chunks in a stack may be visible.

- In the event of a jam in the finisher, it may be necessary to discard waste sheets of partial chunks that have collected in the compiling station. This is kept to a minimum, and is only necessary in a limited number of conditions.
- The maximum chunk size can be modified to meet workflow needs; lowering it reduces potential job recovery waste but increases the number of chunk boundaries, thus affecting stack appearance.
- Small set sizes, whether offset or not, require skipped pitches to be inserted to enable the unloading of the compiling station onto the stack below. If the set/subset size is less than 4 sheets in a 144 PPM Nuvera®, or less than 3 sheets in a 120/100 PPM Nuvera®, the system will not achieve full rated speed.
- The BFM can offset between sets, and even within sets (subset offsetting), responding to embedded "jog" or "offset" commands in the print data stream.
- The BFM supports the use of 'jam offset sheets' for identifying where jam interrupts have occurred.
- Since the BFM uses a compiling station, care must be taken to follow job recovery instructions displayed on the GUI so as to avoid mixing unusable output with good output, and risking delivery of duplicate output.
- Requests to unload the stacker (via the door button or the GUI) are honored at the next set or chunk boundary reached, which could be as high as 100 sheets plus 25 sheets of in-process scheduled pages after the time the unload was requested.
- Any unload (initiated by the operator or due to stack full) will result in a switch to an alternate available BFM stacker if present

Media Size Table

Note: The speeds indicated in the table below are the maximum attainable speeds under normal conditions of use, when delivered to the top tray. Delivery to the main stacker can achieve equivalent speeds, except for those paper sizes (as are noted below with an *) for which sheets are not buffered in the BFM compiler transport between sets. Those papers require up to 4 skips between sets, and that needs to be factored into performance expectations.

Media Size Table – contd.

Table 1: BFM System Main and Top Tray Paper Size Range							
BFM / BFM Plus System Standard Paper Sizes							
Paper Size				**Orientation**		**Output Tray**	
Name	**Nuvera® 144 Simplex PPM**	**Inch (WxL)**	**mm (WxL)**	**LEF**	**SEF**	**Top**	**Main**
Env., 6x9, LE fc	144	6x9	(152x229)	x			
Env., 6x9, OB fo	144	6x10.75	(152x273)	x			
Env., C5, LE fc	144	(6.4x9.0)	162x229	x			
Env., C5, OB fo	144	(6.4x10.3)	162x262	x			
Env.,7x10, OB fo	144	7x12	(178x305)	x			
Env., TBD?, OB fo	144	(7.0x11.3)	178x287	x			
Env., 220x312, LE fc	120	(8.7x12.3)	220x312	x			
Envelope, 9x12, LE fc	120	9x12	(229x305)	x			
A5	144	(5.8x8.3)	148x210	x			
Statement	144	8.5x5.5	(216x140)	x			
A5 Tab	144	(6.3x8.3)	161x210	x			
Statement Tab	144	6.0x8.5	(152x216)	x			
7x10	144*	7x10	(178x254)	x			
B5 JIS	144*	(7.2x10.1)	182x257	x			
Executive	144*	7.25x10.5	(184x267)	x			
16K (Taiwan)	144*	(7.6x10.5)	194x267	x			
8x10	144*	8x10	(203x254)	x			
8x10	96*	8x10	(203x254)		x		
Letter	144	8.5x11	(216x279)	x			
Letter	96	8.5x11	(216x279)		x		
Ltr Cover	120	9x11	(229x279)	x			
Ltr Cover	96	9x11	(229x279)		x		
Ltr Tab	120*	9x11	(229x279)	X			
210x270	144	(8.27x10.63)	210x270	x			
210x270	96	(8.27x10.63)	210x270		x		
A4	144	(8.27x11.69)	210x297	x			
A4	96	(8.27x11.69)	210x297		x		
210x330	72*	(8.27x13)	210x330		x		
215x275	144	(8.46x10.83)	215x275	x			
215x275	96	(8.46x10.83)	215x275		x		
215x356	72*	(8.46x14.02)	215x356		x		
216x273	144	(8.5x10.7)	216x273	x			
216x273	96	(8.5x10.7)	216x273		X		
A4 Cover	120	(8.78x11.69)	223x297	X			
A4 Cover	96	(8.78x11.69)	223x297		x		
A4 Tab	120*	(8.78x11.69)	223X297	X			
Spanish (XE)	144	(8.46x12.4)	215x315	X			
Spanish (XE)	72*	(8.46x12.4)	215x315		x		
8x13	72*	8x13	(203x330)		x		
215x330	72*	(8.46x13)	215x330		X		
Foolscap (XE)	72*	8.5x13	(215x330)		X		
220x330	72*	(8.66x13)	220x330		X		
Legal	72*	8.5x14	(216x356)		x		
226x310	120	(8.89x12.2)	226x310	x			

Table 1: BFM System Main and Top Tray Paper Size Range							
BFM / BFM Plus System Standard Paper Sizes							
Paper Size				**Orientation**		**Output Tray**	
Name	**Nuvera® 144 Simplex PPM**	**Inch (WxL)**	**mm (WxL)**	**LEF**	**SEF**	**Top**	**Main**
226x310	72*	(8.89x12.2)	226x310		x		
9x14	72*	9x14	(229x356)		x		
SB4	72*	(9.9x14.1)	252x358		x		
B4 (JIS)	72	(10.12x14.33)	257x364		x		
8K (Taiwan)	72*	(10.51x15.2)	267x388		x		
A3	72*	(11.69x16.54)	297x420		x		
Ledger	72*	11x17	(279x432)		x		
12x18	48	12x18	(305x457)		x		
12x18.5	48	12x18.5	(305x470)		x		
310x432	72*	(12.2x17)	310x432		x		
Transparency	144	8.5x11 (A4)	216x279	x			
SRA3 4up A5	48	12.6x17.7	320x450		x		
4up 6"x9"	48	12.5x18.5	317.5x470		x		
2up 6"x9"	96	12.5x9.5	(317.5x241.3)	x			
SRA4 2up A5	120	(12.6x8.9)	320x225	x			

Media less than 6.85 inches (174 mm) in the process direction are not supported in the BFM stacker.

System Productivity: Xerox Nuvera® 120 / 144 EA DPS with Basic Finishing Module

Productivity will be slightly less for jobs with only 1 or 2 sheets per set.

Output to Top Tray

Simplex to simplex; duplex to duplex

Paper Size	Single-sided sheets printed per minute			Double-sided sheets printed per minute		
	30 page job	10 page job	3 page job	30 page job	10 page job	3 page job
8.5" x 11"	120 / 144	120 / 144	120 / 144	60 / 72	60 / 72	60 / 72
8.5" X 14" **	72	72	72	36	36	36
11" X 17"	72	72	72	36	36	36

** 8.5" X 14" paper feeds "Short-edge" as defined in the system.

Output to Main Stacker – Stapled (Single and Dual staples) and Unstapled

Simplex to simplex; duplex to duplex

Paper Size	Single-sided sheets printed per minute			Double-sided sheets printed per minute		
	30 page job	10 page job	3 page job	30 page job	10 page job	3 page job
8.5" x 11"	120 / 144	120 / 144	120 / 107	60 / 72	60 / 72	60 / 65
8.5" X 14" **	67	60	43	34	30	22
11" X 17"	67	60	43	34	30	22

** 8.5" X 14" paper feeds "Short-edge" as defined in the system.

Finishing Transport Module (FTM)

The Finishing Transport Module enables inline finishing by providing document transport capability and full DFA support to DFA compliant finishing devices.

Key Features include:

- Dual DFA enabled output heights
- Center or Edge registered output delivery
- Varying transport speeds to maximize throughput capability
- Built-in rotator to maintain productivity when finishing smaller size applications.

Please refer to the Finishing Transport Module (FTM) Solutions Planning Guide for further site planning information, system dependencies, limitations, valid configurations and device specifications.

Dimensions	Finishing Transport Module (FTM)
Width x Depth x Height	35" x 28" x 44.6" (889mm x 711.2mm x 1133mm)
Bypass Output Heights	34" (860mm) & 40.3" (1024mm)
Weight	389 lbs. (176 kg)
Clearance: Operator	Minimum 24" in front of module
Clearance: Service	Minimum 30" on all sides

Electrical & Environmental	Finishing Transport Module (FTM)	
	Minimum	Maximum
Temperature Range	41° F (5° C)	95° F (35° C)
Humidity Range	10% RH	85% RH
Altitude	- 100 ft (31m)	40,000 ft (123192m)
Sound Emission		LpA 57 dBs
Power	120 VAC ± 10%, 60 Hz, 7.5 A 220 VAC ± 10%, 50 Hz, 3.5 A	

Media Latitude & Capacity	Finishing Transport Module (FTM)	
Stock Weight Range	Uncoated: 40 lb. text to 90 lb. cover (56 to 250 gsm) Coated: dependent on the finishing device attached	
Stock Size Range	Top Tray	7" x 10" to 12.6" x 18.5" (177.8mm x 254mm to 320mm x 470mm)
	Bypass with Rotation	7" x 10" to 12.6" x 14.3" (177.8mm x 254mm to 320mm x 363.2mm)
	Bypass without Rotation	7" x 10" to 12.6" x 18.5" (177.8mm x 254mm to 320mm x 470mm)
Top Tray Capacity	250 (20 lb. bond / 75 gsm)	

Xerox DS5000 High Capacity Stacker

The DS5000 High Capacity Stacker (HCS) provides long periods of unattended operation and facilitates transport of accumulated offset stacks of printed output for post processing. The stacks are easily moved on one of two wheeled dollies supplied with stacker.. The stackers bypass capability allows for transporting output to inline 3rd party finishing devices. A Finisher Transport Module is required for in-line connectivity to the printer.

Please refer to the DS5000 Solutions Planning Guide for further site planning information, system dependencies, limitations, valid configurations and device specifications

Dimensions	DS5000
Width X Depth X Height	39.4" x 28.7" x 47.2" (1000mm x 730mm x 1200mm)
Input Height	40.3" (1024mm)
Bypass Output Height	40.3" (1024mm)
Weight	429 lbs. (195 kg) (includes 1 dolly)
Clearance: Operator	Minimum 24" in front of module
Clearance: Service	Minimum 30" on all sides

Electrical & Environmental	DS5000	
	Minimum	Maximum
Temperature Range	50° F (10° C)	90° F (32° C)
Humidity Range	10% RH	85% RH
Altitude	No restriction	No restriction
Sound Emission		72 dBs
Power	107 - 127 VAC, 60 Hz, 15 Amps, Single Phase 220/230/240 (Line to Neutral) VAC ± 10%, 50 Hz, 13 AmDPS/10 Amps GFI Independent Power Cord	

Media Latitude	DS5000
Stock Weight Range	Uncoated: 16 lb. bond to 110 lb. index (60 to 200 gsm) Coated, Single Side: 120 – 220gsm Coated, Two Sides: 120 – 220gsm
Stock Size Range	7.0" x 10.0" to 12.6" x 18.5" (177.8mm x 254mm to 320mm x 470mm)
Specialty Media	Carbonless, Tabs, Never Tear, Pre-printed Offset
Top Tray Capacity	250 (20 lb. bond / 75 gsm)
Main Stacker	5000 (20 lb. bond / 75 gsm) Maximum Stack Height 18.3" (465mm)
Stapler	None

Notes related to DocuPrint migration

The DS5000 is a sheet stacking device. It is designed to optimally deliver sheets one at a time into a neat stack, and optionally offset between the sheets; however the following should be noted:

- The stack height limit cannot be adjusted.
- When full, it will switch to another available DS5000 stacker, if present.

- An operator can not request an unload dynamically while the DS5000 is in operation. To unload, the operator must wait until the stacker becomes full, or pause the machine.
- The DS5000 does not honor “jog” or “offset” requests embedded in the print data stream (i.e. the DS5000 does not support subset offsetting).
- The DS5000 can offset any size sets at full rated speed, without incurring additional skips.
- The DS5000 does not support the use of ‘jam offset sheets’.

C.P. Bourg BDFx Booklet Maker with Optional BCFx Covers Feeder and SquareEdge Module

The C.P. Bourg BDFx is a fully automated signature booklet maker, which produces high quality saddle stitched booklets inline. The optional cover insertion module (BCFx) can feed preprinted cover stock up to 300 gsm in sheet sizes up to 11" x 17".

The new SquareEdge (SQEDG) Module option further expands its capability by offering an optional square edge spine. The BDFx can also top or corner stitch from 2 to 50 sheets. In addition, it can be used in the fold only mode.
A Finisher Transport Module is required for in-line connectivity to the printer.
A BFM Plus or a Xerox Document Stacker 5000 is required for stacking capability.

Please refer to the C.P. Bourg BDFx Booklet Maker Solutions Planning Guide for further site planning information, system dependencies, limitations, valid configurations and device specifications.

Dimensions	Bourg BDFx	Bourg BCFx	SQEDG
Width x Depth x Height	105" x 30 " x 71" (267mm x 76mm x 1803mm)	26.75" x 27" x 52" (680mm x 687mm x 1320mm)	28" x 29.5" x 49" (707mm x 745mm x 1242mm)
Input Height	34" (860mm) 40.3" (1024mm)	34" (860mm) 40.3" (1024mm)	34" (860mm) 40.3" (1024mm)
Output Height	NA	34" (860mm)	NA
Weight	992lbs. (450 kg)	198 lbs. (90 kg)	291 lbs. (132 kg)
Clearance: Operator	Minimum 24" (610 mm) in front of module	Minimum 24" (610 mm) in front of module	Minimum 24" (610 mm) in front of module
Clearance: Service	Minimum 35" (889 mm) on all sides	Minimum 35" (889 mm) on all sides	Minimum 35" (889 mm) on all sides

Device	North America	Europe
BDF-X Power	120 VAC (+/- 10%), 60 Hz, 10A	230 VAC (+/- 10%), 50 Hz, 7A
BCF-X Power	120 VAC (+/- 10%), 60 Hz, 5A	230 VAC (+/- 10%), 50 Hz, 3A
SQEDG Power	120 VAC (+/- 10%), 60 Hz, 5A	230 VAC (+/- 10%), 50 Hz, 3A

BDFx / BCFx/ SQEDG Environment				
Temperature	**Humidity**	**Heat Emission**	**Sound Emission**	**Altitude**
41 – 85° F 5 – 29° C	50-85%	BDFx 2560 btu / hr BCFx 1590 btu / hr SQEDG 2400 btu / hr	72 dba	(100) – 4000 ft (31) – 1219 m

Stapling / Folding		Specifications
Paper Type / Weight	**BDFx / SQEDG**:	Uncoated Stock, 16 lbs Bond – 110 lbs Index (60 - 200 gsm) Uncoated Cover Sheet: Uncoated 20lb - 10 pt cover (80 - 300gsm) Coated Stock: Please see Solutions Planning Guide
	BCFx:	Uncoated Cover Stock, 20 lbs Bond – 10 pt cover stock (80 – 300 gsm∗) ∗ - for all cover stocks, excluding window cutouts Coated Stock: Please see Solutions Planning Guide
Paper Size	**BDFx / SQEDG**	5.5 x 8.5” – 12.6 x 18.5” (140 x 216 mm – 320 x 470 mm)
	BDFx w / BCFx in bypass mode:	8 x 8” – 12.25 x 17” (203 x 203 mm – 310 x 432 mm)
	BDFx w / BCFx feeding covers	8 x 8” – 11.75 x 17” (203 x 203 mm – 298 x 432 mm)
Booklet Sizes	**BDFx**	5.5 x 4.25” – 12.6 x 9.25” (140 x 108 mm – 320 x 235 mm)
	BDFx w / BCFx in bypass mode	8 x 4” – 12.25 x 8.5” (203 x 101 mm – 310 x 216 mm)
	BDFx w / BCFx feeding covers	8 x 4” – 11.75 x 8.5” (203 x 101 mm – 298 x 216 mm)
Edge Stapling	**BDFx / SQEDG**	5.5 x 8.25” – 11.7 x 14” (140 x 210 mm – 297 x 356 mm)
	With BCFx	8 x 10” (SEF) – 11.7 x 12.25” (LEF) (203 x 254 mm – 297 x 310 mm) 8 x 10” – 11.7 x 14” (203 x 254 mm – 297 x 356 mm)
Face Trim		0 – ¾” (0 – 19 mm)
Stitch Head		Two to four stitch heads (Hohner or Acme)
Sheet Capacity (Stitching)	**Edge / Top / Corner Stitching**	2 – 50 sheets
	Saddle Stitching	2 – 22 sheets (20 lb Bond / 80 gsm)
Input Height		34” (860 mm) and 40.2” (1021 mm)

Xerox SquareFold® BookletMaker (SQFBM)

The Xerox SquareFold Booklet Maker (SQFBM) is a unique Xerox finishing product offering. The SQFBM has an additional SquareFold Module that flattens the edge of a saddle-stapled booklet to produce the look and feel of a perfect bound book.

SquareFold booklets stand upright on shelves for easy identification and retrieval, and they stack compactly to minimize shipping costs. For small size booklets sheets can be rotated in the Finishing Transport module.

Please refer to the Xerox SquareFold Booklet Maker Solutions Planning Guide for further site planning information, system dependencies, limitations, valid configurations and device specifications.

Dimensions	SQUAREFOLD® Booklet Maker (SQFBM)
Width x Depth x Height	140" x 29" x 50" (3556mm x 740mm x 1270mm)
Input Height	34" (860mm) 40.3" (1024mm)
Weight	1285 lbs. (583 kg)
Clearance: Operator	Minimum 24 " in front of module
Clearance: Service	Minimum 30" on all sides

Electrical & Environmental		SQUAREFOLD® Booklet Maker (SQFBM)	
		Minimum	**Maximum**
Temperature Range		50° F (10° C)	90° F (32° C)
Humidity Range		15% RH	85% RH
Altitude		TBD ft (m)	TBD ft (m)
Sound Emission		50 dBa	70 dBa (continuous)
Power	SQFLD Bookletmaker	110 VAC ± 10%, 60 Hz, 6 Amps 220 – 240 VAC ± 10% , 50 Hz, 3Amps	
	SQFLD Module	110 VAC ± 10%, 60 Hz, 6 Amps 220 – 240 VAC ± 10% , 50 Hz, 3Amps	

Media Latitude		SQUAREFOLD® Booklet Maker (SQFBM)
Stock Weight Range	SQFLD BookletMaker	Uncoated: 16 lb. bond to 110 lb. index (60 to 200 gsm) Coated Stock: Please see Solutions Planning Guide
Specialty Media		Not Supported
Stock Size Range - Booklets		8.5" x 11" to 12.25" x 18.2" (216mm x 280mm to 311mm x 462mm) Cross Feed: 8.0" to 12.25" (203mm to 463mm)
Booklet Sizes		5.5" x 8.5" to 8.5" x 11" (140mm x 216mm to 216mm x 279mm)
Stock Size Range - Edge Stapling		7" x 8" to 9.125" x 14.33" (178mm x 203mm to 232mm x 364mm) Cross Feed: 7" to 14.33" (203mm to 364mm)
Capacity	**Fold or Staple/ Fold**	1 – 22 sheets, 20 lbs (80 gsm) 6 – 22 sheets in SquareFold mode, 20 lbs (80 gsm)
	Edge/ Top/ Corner	2 – 50 sheets, 20 lbs (80 gsm)
Stapling		Saddle stapling, 2 staple heads with 5,000 staples

GBC Fusion Punch II with Offset Stacker

The GBC Fusion Punch II provides inline printer punching combining printing and punching into one step. Single sheets are punched and emerge ready to be finished into lay flat documents. These types of documents are typically bound with coil, wire or plastic comb binding and will lay flat when opened.

A wide variety of hole punch patterns are available. The die sets are lightweight and do not require setup adjustment time when changed. The operator can easily replace them. The attached stacker can offset stack up to 2,500 sheets preparing each document for immediate binding. The Fusion Punch II can also be equipped with an optional Bypass Stacker. This allows the operator to empty one stacker while the other stacker is in use.

A Finisher Transport Module is required for in-line connectivity to the printer.

Please refer to the GBC Fusion Punch II Solutions Planning Guide for further site planning information, system dependencies, limitations, valid configurations and device specifications.

Dimensions	GBC Fusion Punch II	Bypass Stacker	Offset Stacker
Width x Depth x Height	54" x 32 " x 46 " (1372 mm x 813 mm x 1168 mm)	27" x 32" x 46" (686 x 813 x 1168 mm)	27" x 32 " x 46" (686mm x 813mm x 1168mm)
Input Height	34" (860mm) 40.3" (1024mm)	NA	NA
Weight	620 lbs. (281 kg)	520 lbs (236 kg)	270 lbs (123 kg)
Weight - Shipping	920 lbs (471 kg)	720 lbs (326 kg)	470 lbs (213 kg)
Clearance: Operator	Minimum 24 " in front of module	Minimum 24" in front of module	Minimum 24 " in front of module
Clearance: Service	Minimum 36 " on all sides	Minimum 36" on all sides	Minimum 36 " on all sides

Electrical & Environmental		GBC Fusion Punch II	
		Minimum	Maximum
Temperature Range		41° F (40° C)	104° F (50° C)
Humidity Range		30% RH	95% RH
Heat Output Punch & Stacker		1198 btu/hr. (115 V 60 Hz)	2150 btu/hr. (230 V 50 Hz)
Altitude			3280ft (1000m)
Sound Emission (with stacker)		64.7 dBs (Idling)	73.7dBs(Running, Punch & Stacker)
Power - Dedicated outlet recommended	**Punch**	115VAC, 60 Hz, 4.7A (230VAC, 50Hz, 6.8A)	
	Stacker	115VAC, 60 Hz, 1.0A (230VAC, 50Hz, 0.25A)	
Certification		US/Canadian approval by CSA. GS mark by TUV Product Services	
Compliance		CE for European Union requirement	

Media Latitude	GBC Fusion Punch II
Stock Weight Range	Uncoated: 16 lb. to 90 lb. index (60 to 200 gsm)
Specialty Media	Tabs
Stock Size Range	7.0" x 10.0" to 11.0" x 17.0" (178mm x 254mm to 279mm x 432mm)
Top Tray Capacity	250
Main Stacker	2500
Stapler	None

Xerox DB120-D Document Binder

The Document Binder DB120-D uses a unique thermal binding technology combined with pre-formed covers to create a high quality professionally bound document. The DB120-D binds 8.5" x 11" or A4 documents up to 120 pages in a variety of attractive covers. You can custom order imprinted covers with your logo or a particular design. The pre-formed cover wraps around the internal pages to produce a perfect bound document with a commercial look and feel. The document pages fit neatly and uniformly into the bind for the perfect bound look with no trimming needed. The usability improves due to the hinged spine scoring which allows pages to lie flat when opened. The book binding adhesive is reinforced with a special mesh/cloth material to ensure a strong, consistent bind with no mess or oozing.

A Finisher Transport Module is required for in-line connectivity to the printer.
A BFM Plus or a Xerox Document Stacker 5000 is highly recommended for stacking capability.

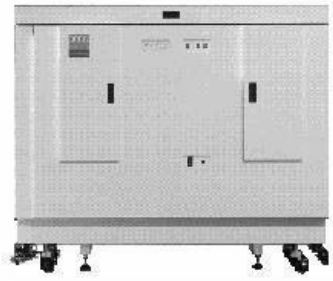
Please refer to the Xerox Document Binder 120-D Solutions Planning Guide for further site planning information, system dependencies, limitations, valid configurations and device specifications

Dimensions	Xerox DB120-D Document Binder
Width X Depth X Height	59.25" x 24" x 51" (1423mm x 610mm x 1296mm)
Input Heights	34" (860 mm) and (optionally) 40.2" (1021 mm)
Weight	462 lbs. (210 kg)
Clearance: Operator	Minimum 24" in front of module
Clearance: Service	Minimum 24" on all sides

Electrical & Environmental	Xerox DB120-D Document Binder	
	Minimum	Maximum
Temperature Range	50° F (10° C)	90° F (32° C)
Humidity Range	10% RH	85% RH
Altitude	No restriction	No restriction
Sound Emission	43.3 dBs	62.3 dBs
Power	115 VAC ± 10%, 60 Hz, 15 – 20 Amps	

Media Latitude	Xerox DB120-D Document Binder
Stock Weight Range	Uncoated: 20 lb. bond to 32 lb. index (75 to 120 gsm)* * Weights above 32 lb. (120 gsm) should be used only as covers, dividers or inserts.
Specialty Media	Flush Cut Tabs
Stock Size Range	8.5" x 11" or A4
Pre-Formed Covers **(Sheet count with covers based on 20lb bond (75 gsm))**	1/16" (1.5mm) = 3-15 Sheets** (** - 1-15 sheets in Walk-up Mode)
	1/8" (3mm) = 16-30 Sheets
	¼ " (6mm) = 31-60 Sheets
	3/8" (9mm) = 61-90 Sheets
	½" (13 mm) = 91-120 Sheets

Xerox Manual and Book Factory


The Xerox Manual + Book Factory (MBF) is comprised of the:

- C.P. Bourg BBF2005 – perfect binder
- C.P. Bourg BBR – out feed conveyor for the BBF2005
- C.P. Bourg BBF2005 Input – input module for the BBF2005
- C.P. Bourg BPRF – perforate, rotate, fold module (***optional***)
- Challenge CMT-330 – three-side trimmer (***optional***)
- C.P. Bourg BDFx (with optional peripherals BCFx, SQEDG, and Gateway) – booklet maker (***currently not available with Nuvera®***)

Documents flow directly from the Xerox printer to the MBF without the bottleneck associated with the traditional offline binding process. The CP Bourg BBF2005 Perfect Binder and BPRF module match the output speed of the digital production press.

The CP Bourg Perforate, Rotate, Fold (BPRF) module receives the printed sheet of paper from the printer and immediately perforates the sheet with a micro-perforation across it center. The sheet is then turned 90° and folded on the perforation. The printed, perforated and folded paper then exits the BPRF and enters the accumulating section (input section) of the Bourg Perfect Binder BBF2005. This process enables productive, cost effective 2-up duplex signature printing.

The CP Bourg BBF 2005 Perfect Binder is the integrated perfect binder that produces professionally finished books quickly and easily. The Perfect Binder compiles the pages (book block) from the BPRF, jogs the pages into position and then vibrates them into alignment. The pages are clamped together and run across a milling station, which roughs the spine edge for superior adhesive adherence. After the adhesive is applied, the book block is moved to the cover mounting station. The cover is registered, applied in precise position, clamped to the book block and delivered to the output tray.

The BBF2005 perfect binder dynamically senses the thickness of the book block during the clamping operation, making it ideal for printing short runs of books with varying thickness. The book is then ready to be trimmed. As an option, the Book Factory can also be equipped with an inline trimmer, the Challenge CMT-330. The CMT 330 is a three-side trimmer designed for the on-demand printing environment. It features full digital control of the trimming process - servomotors control all adjustments normally done by hand with a traditional trimmer.

A Finisher Transport Module is required for in-line connectivity to the printer.

Please refer to theXerox Book Factory Solutions Planning Guide for further site planning information, system dependencies, limitations, valid configurations and device specifications.

Dimensions	BBF2005	BPRF	BBF2005 Input Unit
Width x Depth x Height	102" x 43" x 45" 2575 x 1095 x 1143 mm	64" x 31" x 51" 1625 x 787 x 1295 mm	30.5" (38" with bypass option) x 28.5" x 45" 775 x 725 x 1143 mm
Weight	1254 lbs (570 kg)	562 lbs (255 kg)	333 lbs (150 kg)
Weight - Shipping	1738 lbs (788 kg)	824 lbs (373 kg)	407 lbs (184 kg)
Clearance: Operator	Minimum 24" (610 mm) in front of the device	Minimum 24" (610 mm) in front of the device	Minimum 24" (610 mm) in front of the device
Clearance: Service	Minimum 36" (914 mm) behind the device	Minimum 30" (763mm) on all sides of the device	Minimum 30" (763 mm) on all sides of the device

Dimensions	CMT-330	Cooling Tower	Conveyors
Width x Depth x Height	84" x 34.5" x 61" 2134 mm x 876 mm x 1549 mm	21.5" x 37" x 45.5" 550 mm x 950 mm x 116 mm	**In-feed**: 40" x 29" x 26" 1020 mm x 740 mm x 660 mm **Exit**: 47" x 12.2" x 39.5" 1200 mm x 310 mm x 1010 mm
Weight	2540 lbs (1140 kg)	335 lbs (152 kg)	**In-feed**: 150 lbs (68 kg) **Exit**: 85 lbs (39 kg)
Weight - Shipping	2850 lbs (1300 kg)	470 lbs (214 kg)	290 lbs (132 kg)
Clearance: Operator	Minimum 24" (610 mm) in front of the device	Minimum 24" (610 mm) in front of the device	Minimum 24" (610 mm) in front of the device
Clearance: Service	Minimum 30" (763 mm) on all sides of the device	Minimum 30" (763 mm) on all sides of the device	Minimum 30" (763 mm) on all sides of the device

Electrical & Environmental		BPRF / BBF2005 / BBF Input Unit / CMT - 330	
		Minimum	Maximum
Temperature Range		41° F (5° C)	85° F (29° C)
Humidity Range		50% RH	85% RH
Altitude		-100 ft. (-31m)	4,000 ft. (1,219 m)
Heat Output		**BPRF**: 3240 btu/hr **BBF2005**: 10024 btu/hr **CMT-330**: 7500 btu/hr	
Sound Emission		**BPRF / BBF2005 / BBF 2005 Input:** 79 db **CMT-330**: 80db	
Power	**BPRF**	110 VAC, 60 Hz, 15A 230 VAC, 50 Hz, 10A	
	BBF2005	220 VAC, 20A, 3 phase 380/400/415 VAC, 50 Hz, 20A	
	CMT-330	3 Phase, 60 Hz, AC 208/230 Volts, 25 Amps (service size 30 Amps)	
Air		CMT –330: 80 - 90 PSI, 5 CFM Un-lubricated	

Media Latitude	BBF2005 with BPRF	BBF2205 without BPRF
Stock Weight Range	Book Body: Min.: 16 lbs Bond (60 gsm) Max. (w/o Perforate & Fold): 90 lbs index (160 gsm) Max. (Perforate, Fold or Perforate & Fold): 24 lbs Bond (90 gsm) Cover: Min.: 30 lbs Cover (80 gsm) Max.: 90 lbs Cover (250 gsm) * * - May require creasing.	Book Body: Min.: 16 lbs Bond (60 gsm) Max.: 40 lbs Bond (160 gsm) Cover: Min.: 30 lbs Cover (80 gsm) Max.: 90 lbs Cover (250 gsm) * * - May require creasing.
Stock Size Range	8.5 x 11" – 12.6 x 17" (210 x 280 mm – 320 x 432 mm) * * - Maximum paper size with optional Fold Plate: 12.6 x 18.5" (320 x 470 mm)	8.25 x 7" – 12.6 x 12" (203 x 140 mm – 320 x 305 mm)
Book Sizes (Before Trimming)	8.25 x 5.5" – 14 x 12" (210 x 140 mm – 356 x 305 mm) Walk-up mode: 8.25 x 3.5" – 14 x 12" (210 x 89 mm – 356 x 305 mm)	8.25 x 5.5" – 14 x 12" (210 x 140mm – 356 x 305 mm) Walk-up mode: 8.25 x 3.5" – 14 x 12" (210 x 89 mm – 356 x 305 mm)
Book Thickness	Min.: 15 sheets duplex or 35 sheets simplex / 20 lbs Bond (80 gsm) Max,: 125 sheets (250 book pages) / 20 lbs Bond (80 gsm) 1.6" (40 mm)	Min.: 15 sheets duplexed / 20 lbs Bond (80 gsm) Max.: 350 sheets / 20 lbs Bond (80 gsm) 1.6" (40 mm)

Post-process Uses of Xerox Nuvera® Output

The following post-process characteristics and usages for Xerox Nuvera® output have been evaluated.

Item	Xerox Nuvera® 100/120/144 EA Digital Production System	Comment
Permanence	Xerographic prints are as permanent as the paper on which they are printed.	The U.S. Patent Office accepts xerographic prints as permanent records.
Overprint in xerographic printer	Prints cannot be successfully fed through a xerographic printer for overprinting.	Any product with a wax-based fusing system would produce the same result.
Overprint in ink jet printer	Prints can be successfully overprinted on an ink jet printer, depending on the area coverage of the print and the wetting characteristics of the ink. Wetting issues are most likely when printing over an area of high dry ink coverage. They may be resolved by selecting a different setting on the ink jet printer to affect the amount of ink printed or the speed of printing.	

Future Features - Xerox Nuvera® 100/120/144 EA Digital Production System

A Customer /Prospect Request (C/PR) is a product feature enhancement request submitted by a Xerox Representative on behalf of a current or prospective Xerox customer. Currently, C/PR's can be submitted for PSG products only.

The C/PR web site at xww.cpr.world.xerox.com can be accessed by the Xerox Representative in order to provide a detailed description of the feature request.