



EFI Colorproof XF v3.1

Service Pack 2

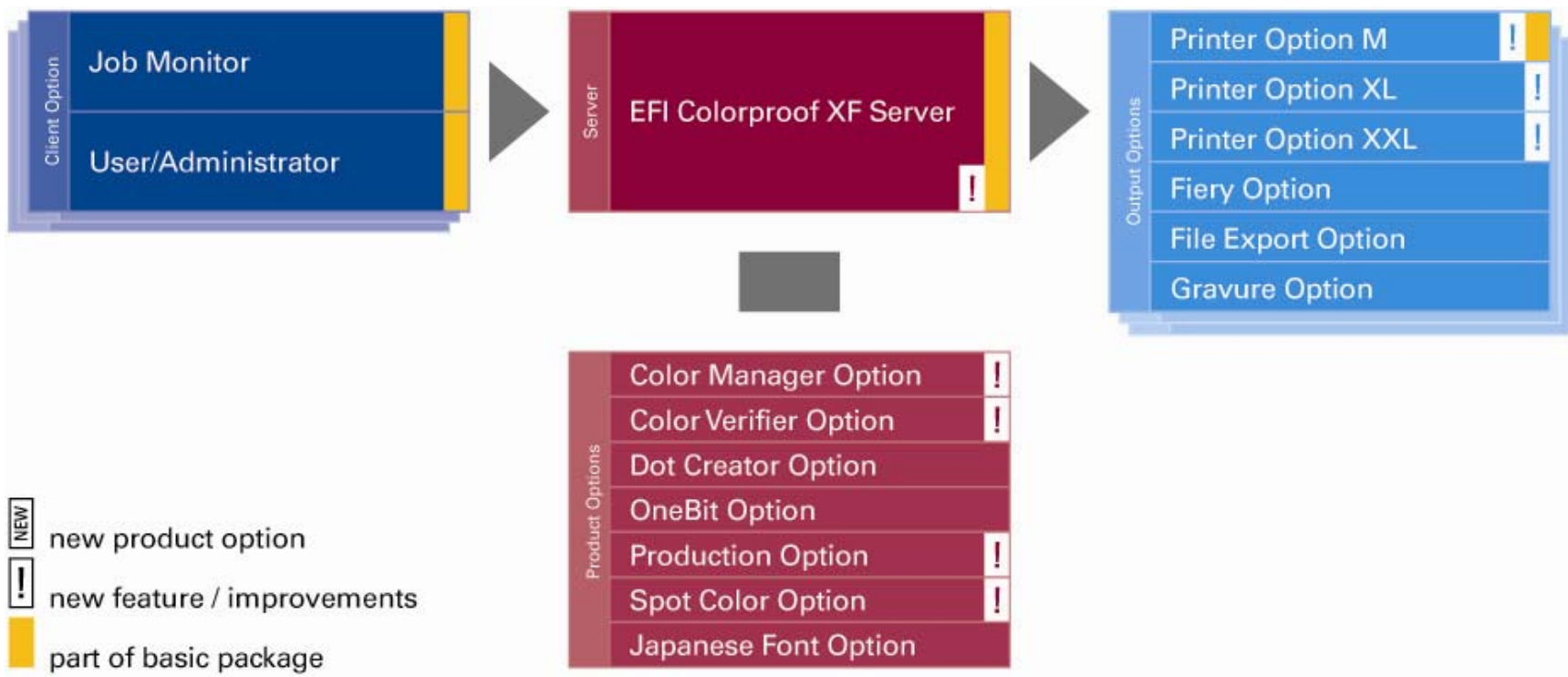
Closer Look

June 27, 2007

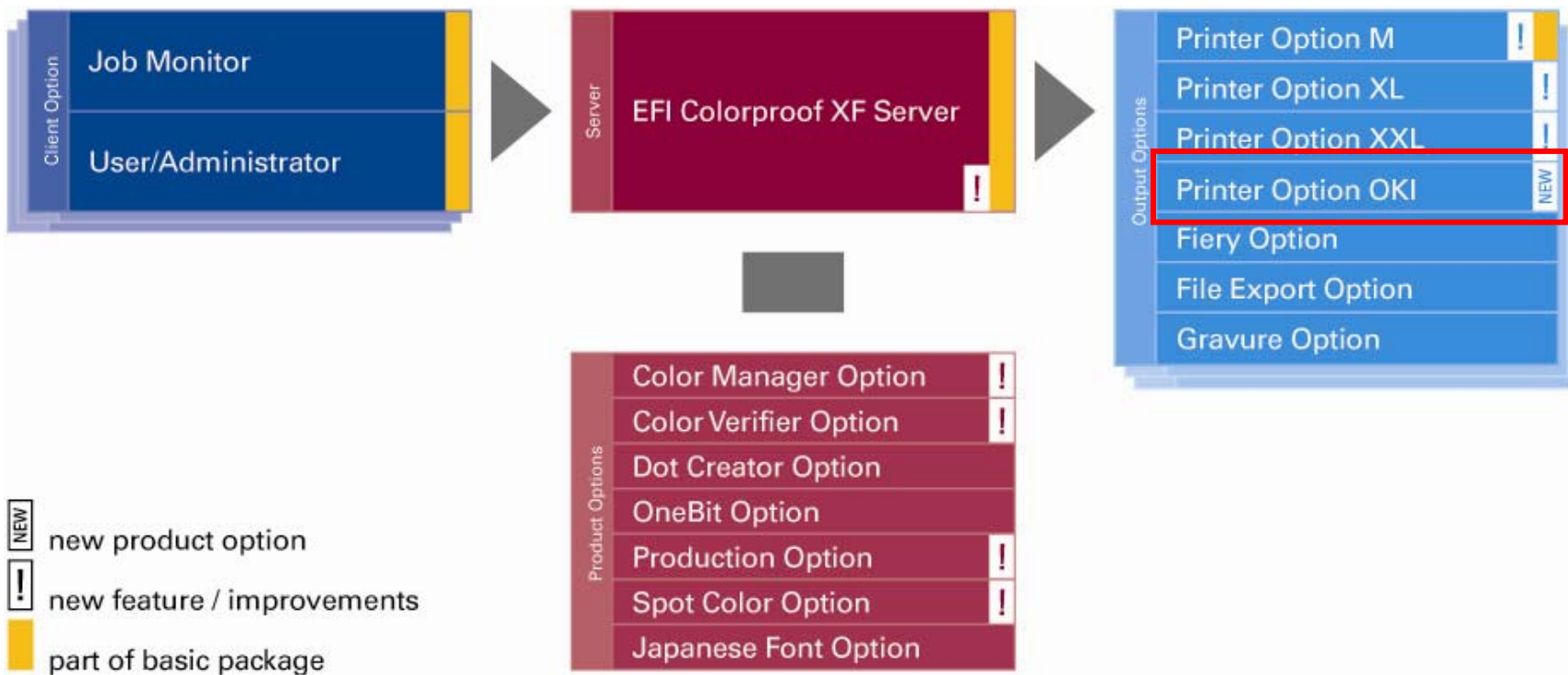


essential to print™

EFI Colorproof XF v3.1 SP2 (without North America)



EFI Colorproof XF v3.1 SP2 (North America only)





1 Overview

- New features and changes
 - Basic Package
 - ISO 12647-7 “compliance”
 - Color adjustments: Can be turned on/off for media wedges
 - FograCert proofing test form
 - Production features
 - Clean Color
 - New crop mark value: bleed
 - Cut mark thickness in point
 - Font checker: list of missing fonts
 - Enhanced print mode and resolution controls
 - Heater support



1 Overview

■ New printers and features

■ Printer Option M

- Canon iPF5100 17"

■ Printer Option XL

- HP Designjet Z3100ps (PS Version) 24"
- Canon iPF6100 24"

■ Printer Option XXL

- HP Designjet Z3100ps (PS Version) 44"
- HP Designjet Z6100ps (PS Version) 42"/60"

■ With respective Printer Option and Printer

- Remote printer monitoring for HP Designjet Zx100 Series
- Non-UV cut measurement device simulation for HP Designjet Zx100 Series
- Canon iPF 5100 / 6100 calibration support
- Epson Stylus Pro 3800 (PX-5800) Halftone Mode



1 Overview

- New features and changes
 - Color Verifer Option
 - ISO 12647-7 “compliance”
 - Color Manager Option
 - ISO 12647-7 “compliance” (Support of IT8.7.4 Chart)
 - Production Option
 - Cut marks for tiling overlapping
 - Spot Color Option
 - Enhanced flexibility of search priorities
 - Use of source file definitions
 - Change default warning color



1 Overview

- Overview supported measurement devices
- Licensing
 - New output licence
 - Oki 5-bit output option (North America-only)



ISO 12647-7 „Compliance“
Basic Package
Color Verifier Option
Color Manager Option

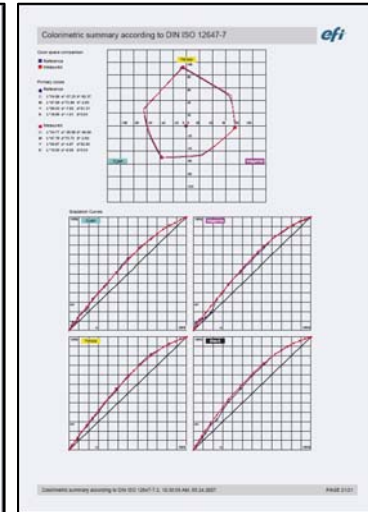


2 DIN ISO 12647-7 Compliance

- What is the DIN ISO 12647-7?
 - Provides general proofing requirements for digital proofing
 - Is not limited to offset printing but meant as general proofing requirements for all printing technologies
- Where can I find it?
 - Color Verifier
 - Delta E, Delta H, Delta T evaluation
 - IT8.7/4 and latest FOGRA media wedge (v2.2) support
 - Color Manager
 - IT8.7/4 support
 - Client
 - Job ticket definition and pre-defined workflow templates

What is the benefit?

- DIN ISO 12647-7 compliant proofing
- Please note the additional SP2 Closer Look with main focus on the new Color Verifier features!



Delta E	Tolerance	Measured	Status
Max. average all patches	3.00	1.24	✓
Max. peak all patches	6.00	5.18	✓
Max. peak CMYK patches	2.50	2.20	✓
Max. average Gray patches	1.50	0.31	✓
Max. peak CMYK patches	5.00	5.27	✗

NOT PASSED

Primary color	max. peak delta E	Tolerance	Measured	Status
Cyan	5.00	0.69	0.00	✓
Magenta	5.00	0.69	0.00	✓
Yellow	5.00	3.35	0.00	✓
Black	5.00	0.96	0.00	✓
White	3.00	1.31	0.00	✓
CMYK	5.00	1.47	0.00	✓

How differences	Tolerance	Measured	Status
Max. peak Cyan	2.50	0.04	✓
Max. peak Magenta	2.50	0.03	✓
Max. peak Yellow	2.50	2.20	✓
Max. peak Black	2.50	0.02	✓
Max. average Gray	1.50	0.31	✓

Tone value differences	Tolerance	Measured	Status
Max. peak Cyan	5.00	2.55	✓
Max. peak Magenta	5.00	5.27	✗
Max. peak Yellow	5.00	1.95	✓
Max. peak Black	5.00	4.45	✓

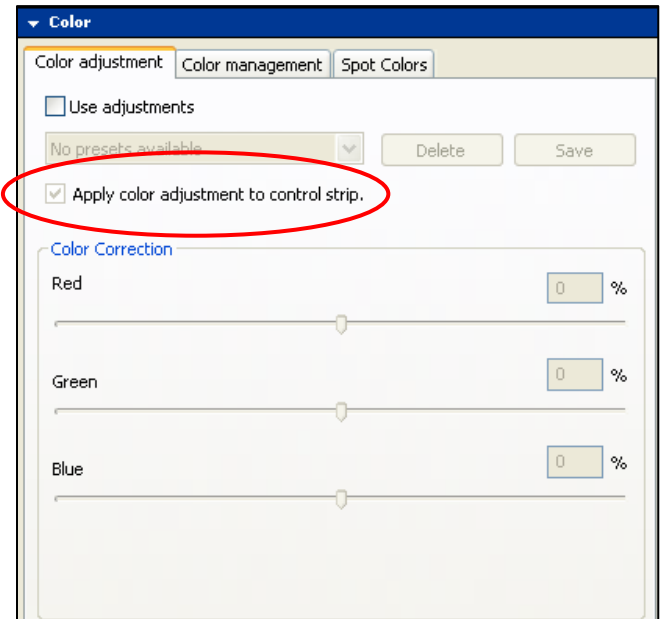


New features and changes

Basic Package

2 Color Adjustments can be turned on/off for media wedges

- What is the functionality?
 - The Color Adjustments now can be turned on or off for the media wedge. By default your color adjustments will be used in the media wedge as well, but by unchecking the check box you can change this behaviour.
- Where can I find it?
 - Color -> Color Adjustment
- What is the benefit?
 - Media wedges can either be used to check the general stability of the printer (checkbox not activated) or to check the job-specific print stability (checkbox activated).



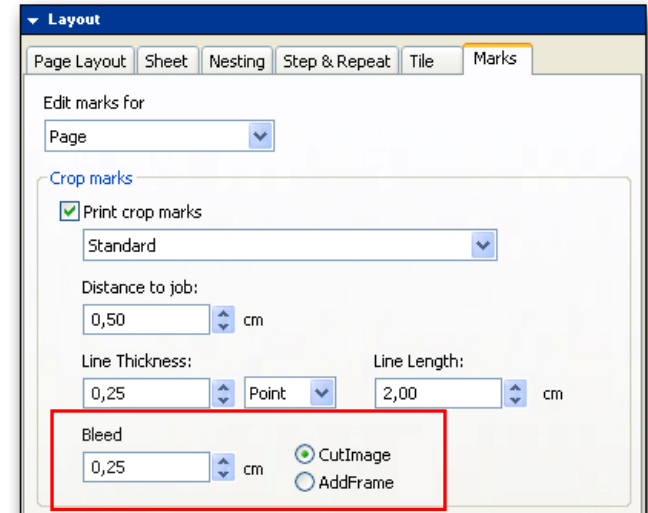
2 FograCert Proofing Test form

- What is the functionality?
 - The latest **FograCert Proof Test Form** (Version 2b) from the Fogra is provided by Colorproof XF 3.1, SP2. It contains an IT8.7/4 in visual layout as well as special control elements. This chart can be measured with the X-Rite SpectroScan and the X-Rite iSis.
 - **IMPORTANT:** When measuring the The FograCert Proof Test Form with the SpectroScan you have to set the chart position as follows: Upper left corner, lower left corner, lower right corner (even if the GUI is telling you to do differently)
- Where can I find it?
 - You can find the PDF in the **Tools / FograCert** folder of your Colorproof XF installation.
- What is the benefit?
 - The official FograCert proofing test form is supposed to be used for a Fogra Proofer Certification. You have to print the test form, verify it with Color Verifier and then send it in to the Fogra which then officially analyses the values. If all parameters are within the defined tolerances then you will be rewarded with an official **certification**.



2 New crop mark value: bleed

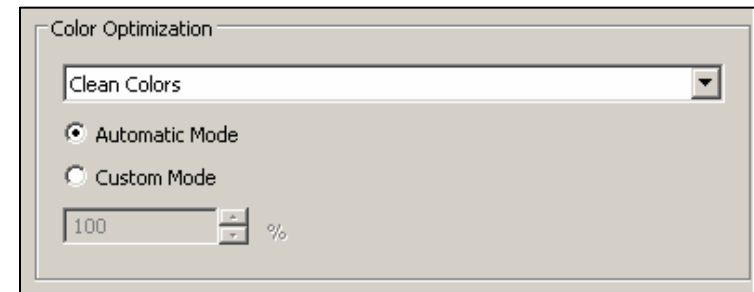
- What is the functionality?
 - Definition of bleed value to cut an image or to add a frame to the image
- Where can I find it?
 - System Manager > Job Properties > Layout > Marks > Crop marks
 - Job Explorer > Job Properties > Layout > Marks > Crop marks
- What is the benefit?
 - To cut an image to the desired format or to add a frame e.g. for finishing





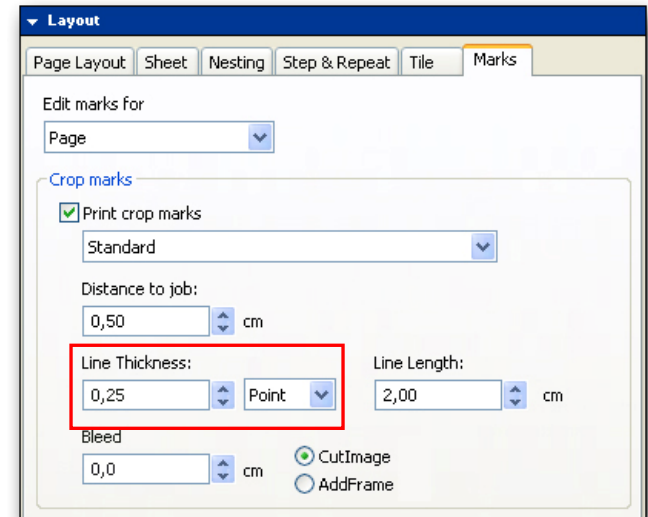
2 Clean Color

- What is the functionality?
 - Clean Color (already part of Fiery XF) can be set to either Automatic or Custom mode. The Automatic mode will provide optimal values for your production setup and will take printer, media and profiles into consideration. The custom mode allows to individually fine tune the %age setting calculated by the Automatic mode.
- Where can I find it?
 - System Manager -> Select your Workflow -> Color Management -> Clean Color
 - Job Explorer -> Select your Job -> Color Management -> Clean Color
- What is the benefit?
 - Vivid, saturated color with pleasant modulation and clean appearance.
 - Smooth cleaning of primary and secondary colors without any influence on color critical areas like grays, skin tones or spot colors.



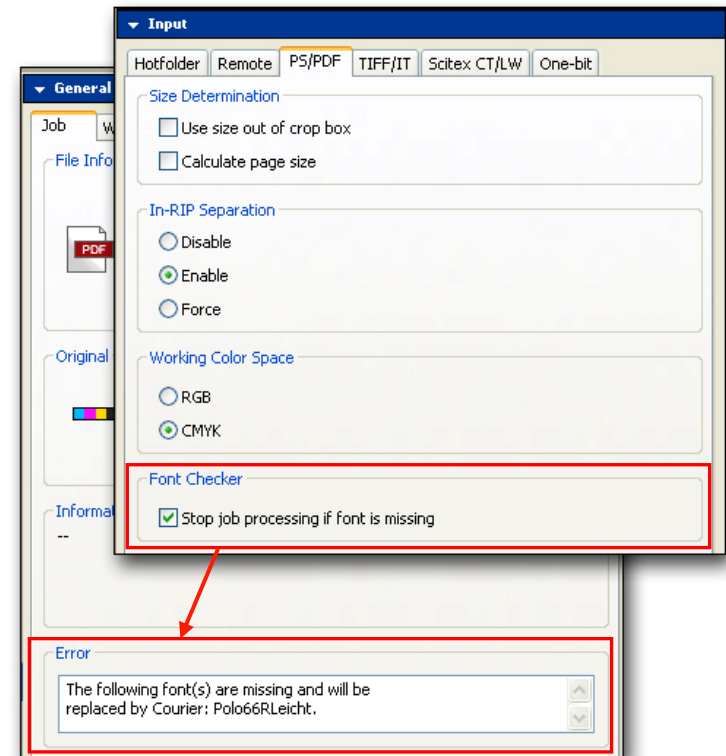
2 Cut mark thickness in point

- What is the functionality?
 - Define the crop mark thickness in points, mm, cm or inch.
- Where can I find it?
 - System Manager > Job Properties > Layout > Marks > Crop marks
 - Job Explorer > Job Properties > Layout > Marks > Crop marks
- What is the benefit?
 - Added measurement system “point” to provide one more standard used in the industry



2 Font checker: list of missing fonts

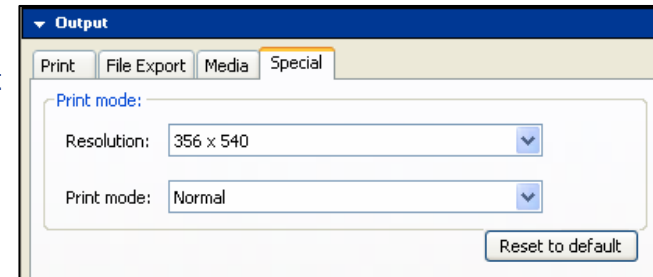
- What is the functionality?
 - If “Stop job processing if font is missing” is activated the error message will list all fonts which are missing.
- Where can I find it?
 - Job Explorer > Job Properties > General > Job > Error
- What is the benefit?
 - To know which fonts are missing and need to be implemented





2 Enhanced Print Mode and Resolution Controls

- What is the functionality?
 - XF SP2 provides the possibility to change the Resolution and/or the Print Mode on workflow / job level. The Print Mode and the Resolution selection are important parts of the printer characterization stored in the EPL file. Changing those two parameters on job level might result in color shifts and in general less accurate colors.
 - Please note that you will get a visual warning if you select a Print Mode and/or Resolution that does not match the one of the EPL. Click “Reset to default” at any time to quickly switch back to the default values that were used to create the EPL.
 - The selection of Resolution / Print Mode is printer specific.
- Where can I find it?
 - Output -> Special
- What is the benefit?
 - Customers in the production markets often want to change those two parameters quickly, for instance to create a quick draft print when full color control is not that important. In order to avoid having to create a completely new linearization and profile for such a case, this feature was added to XF.





2 Heater Support

- What is the functionality?
 - XF SP2 supports remote control for the heaters of the following printer models:
 - HP Designjet 8000s
 - HP Designjet 9000s
 - HP Designjet 10000s
 - More printer models (Mutoh, Mimaki, etc.) coming soon!
 - The number of heaters displayed in the GUI directly depends on the selected printer.
- Where can I find it?
 - Output -> Special
- What is the benefit?
 - Remote control of heater settings without having to deal with the printer panel.

The screenshot shows a 'Heater' control window with the following settings:

- Control Heater Temperature by Rip** (selected):
 - Pre-Heater**
 - Front Heater: 45 °C (Heater Off checkbox is unchecked)
 - Ink Temperature: NA °C (Heater Off checkbox is unchecked)
 - Print Heater**
 - Print Heater: 40 °C (Heater Off checkbox is unchecked)
 - Drying Heater**
 - Rear Heater: 45 °C (Heater Off checkbox is unchecked)
 - Blower Temperature: NA °C (Heater Off checkbox is unchecked)
- Control Heater Temperature by Printer Panel** (unselected)
- Reset to default** button



New printers and features

Printer Options



2 Support of new printers

- Printer Option M
 - Canon iPF5100 17"

- Printer Option XL
 - HP Designjet Z3100ps (PS Version) 24"
 - Canon iPF6100 24"

- Printer Option XXL
 - HP Designjet Z3100ps (PS Version) 44"
 - HP Designjet Z6100ps (PS Version) 42"/60"

Please see the following slides for further information.

Worth knowing about the newly supported printers

Hewlett Packard Designjet Z3100ps (PS version)



- Printer information
 - Technology: DOD Inkjet
 - Two printer sizes: 24"/44"
 - 12 Vivera Pigment Inks: MYRGBcmg(ray)-DarkGray-PhotoK-MatteK-GlossEnhancer
- Application of area
 - Photo/Proofing/Remote Proofing
- Strength printer
 - Stable inks with large color gamut
 - Automatic calibration for consistent prints with closed-loop color calibration
 - High end embedded spectrophotometer delivers accurate and consistent color print-to-print and printer-to-printer
 - Gloss enhancer for consistent surface ensures that inks will be applied evenly
- Strength EFI
 - Fully automated calibration process saves all manual steps
 - Automated integration of measuring based verification of control strips into the printing process saves manual workload
 - Combined with EFI Colorproof XF the perfect professional remote proof system with integrated quality assurance
 - Easy way to highest color accuracy through fully automated color optimisation
 - Support of gloss enhancer

Worth knowing about the newly supported printers

Hewlett Packard Designjet Z6100 Series

■ Printer information

- Technology: DOD Inkjet
- Two printer sizes: 42"/60"
- 8 Vivera Pigment Inks: CMY-MatteK-PhotoK-cmg(ray)
- Two types: Z6100 and Z6100ps (PS version)
- Successor of HP Designjet 5500
- First Customer Shipment: June 4, 2007

■ Application of area

- Photo/Fine Arts/Production/Proofing/Remote Proofing

■ Strength printer

- Print at extremely high speeds
- Stable inks with large color gamut
- Automatic calibration for consistent prints with closed-loop color calibration
- High-end embedded spectrophotometer delivers accurate and consistent color print-to-print and printer-to-printer
- High-capacity 775-ml ink cartridges for fewer print interruptions

■ Strength EFI

- **Colorproof XF v3.1.2 is certified by HP for Z6100 Series achieving high results in all categories (more details next slide)!**
- Fully automated calibration process saves all manual steps
- Automated integration of measuring based verification of control strips into the printing process saves manual workload
- Combined with EFI Colorproof XF the perfect professional remote proof system with integrated quality assurance
- Easy way to highest color accuracy through fully automated color optimisation
- Use of closed-loop color calibration
- Media management – Detection of inserted media type



Worth knowing about the newly supported printers

Hewlett Packard Designjet Z6100 Series

- HP introduces RIP Certification Program for optimal printing experience for the new HP Designjet Z6100 Series
- The Certification Program will provide customers with enhanced compatibility and confidence in the complete solution with assured levels of functionality and interoperability when they select the a HP certified 3-party RIP
- Certification tests include print quality, throughout performance and other important characteristics of printer management and job handling
- Star rating (from n/a up to three stars) reflects the extent which a particular RIP performs in a given functional area
- Star rating for certified EFI Colorproof XF v3.1.2:



Certified for HP Designjet Z6100	RIP	Printing Performance	Use of the spectrophotometer	HP media support	Printer status reporting	Job Accounting	Job Cancel
EFI	Colorproof XF v3.1.2	★★★	★★	★★	★★	★★★	★★★



2 Remote Printer Monitoring for HP Designjet Z3100 / Z6100 models

- What is the functionality?
 - Extended support for **Status, Media and Ink Level** for the following HP printer models:
 - HP Designjet Z2100 (24 inch / 44 inch)
 - HP Designjet Z3100 (24 inch / 44 inch)
 - HP Designjet Z3100 PS (24 inch / 44 inch)
 - HP Designjet Z6100 (42 inch 60 inch)
 - HP Designjet Z6100 PS (42 inch / 60 inch)
 - Also **Custom Media Sets** that have been downloaded into the printer now can be used by the **Color Manager / LinTool**.
- Where can I find it?
 - General -> Printer
 - Job list
- What is the benefit?
 - Remote Printer Monitoring

General

Job | Workflow | **Printer** | Server

Output Device

Name:
Linearization device

Description:

Device type:
HP Designjet Z6100 (60 inch)

Status

Ready

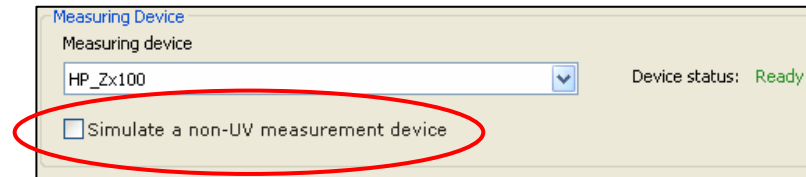
Supplies

Media	HP Premium Instant-dry Photo Gloss
Magenta Ink	616 ml
Light magenta Ink	548 ml
Photo black Ink	668 ml
Matte black Ink	687 ml
Yellow Ink	551 ml
Light cyan Ink	629 ml
Light gray Ink	550 ml
Cyan Ink	679 ml

Job Status	Name	Job ID	Processing Time	Ink Used	Media Usage	Printer
Printed	mappe_ethbibl_s1.indd	00253	00:08:44	0,614 ml	0,56 m²	HP Designjet Z6100 (60 inch)
Printed	Lin4c_Spectro5can	00333	00:00:13	0,316 ml	0,89 m²	HP Designjet Z6100 (60 inch)

2 Non-UV Cut measurement device simulation for HP Zx100 series

- What is the functionality?
 - XF provides the possibility to simulate white backing and a non-UV Cut measurement device when using the internal spectrophotometer of the HP Z series. The internal spectrophotometer measurements of that printer series is based on UV Cut filters and black backing.
- Where can I find it?
 - Color Manager -> Measuring Device
- What is the benefit?
 - Activating the non-UV Cut simulation often helps to achieve better proofing results when simulating the FOGRA characterization data as all these data sets have been generated with a non-UV Cut measurement device and white backing.



Canon iPF5100 & iPF6100



■ Printer information

- Technology: DOD Inkjet
- Two printer sizes: 17" (iPF5100) / 24" (iPF6100)
- 12 Canon Pigment Inks: CMYKRGBcm-MatteK-MediumK-LightK)
- First Customer Shipment
 - iPF5100: Planned August/September 07
 - iPF6100: Since June 07

■ Application of area

- Photo/Proofing/LFP Production

■ Strength printer

- Print at extremely high speeds
- Wide color gamut
- iPF5100
 - Multiple media-handling options (standard tray, front straight path and rear manual feed, optional roll feed)
 - Increased productivity due to automatic switching between the roll feed and cassette tray
- Onboard calibration to set printer into a defined state

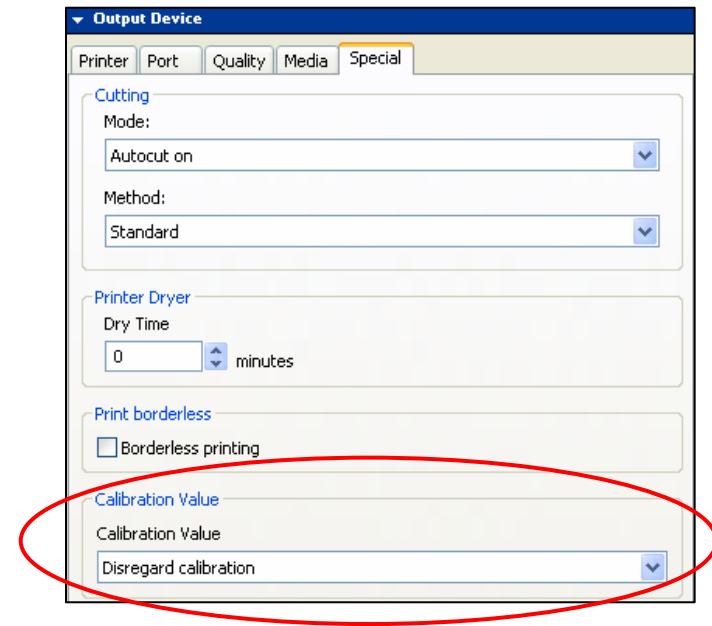
■ Strength EFI

- Support of onboard calibration for color consistency among Canon iPF printers



2 Canon iPF 5100 / 6100 calibration support

- What is the functionality?
 - The new Canon printer models Canon iPF 5100 and 6100 provide the possibility to do an onboard calibration. This calibration will set the printer into a defined state.
- Where can I find it?
 - The calibration itself is triggered at the printer panel. Within XF you can decide whether to use the calibration, or disregard it. Please do so under **Output Device -> Special -> Calibration Value**. By default the feature is set to “Disregard calibration”. Please note that what ever setting you use, you should use the same setting for both linearization / profiling and for your prints / proofs.
- What is the benefit?
 - Improved color consistency among several Canon iPF printer units.

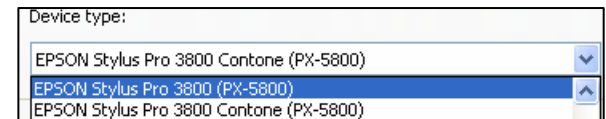




2 Epson Stylus Pro 3800 Halftone Mode

■ What is the functionality?

- Epson Stylus Pro 3800 halftone support
- The Epson SP 3800 printer now can be addressed in two modes:
 - **Halftone Mode:** “EPSON Stylus Pro 3800 (PX-5800)”
 - **Contone Mode:** “EPSON Stylus Pro 3800 Contone (PX-5800)”

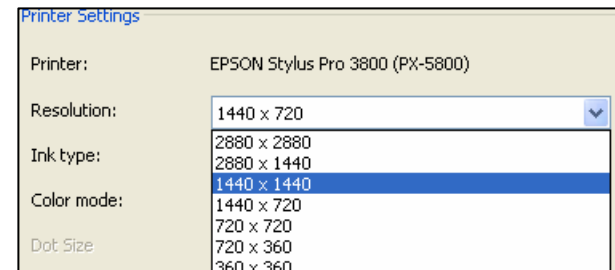


■ Where can I find it?

- System Manager -> Linearization / Output Device
- Color Manager -> Linearization/Profiling -> Printer selection

■ What is the benefit?

- The main advantage of the halftone mode is the support of two additional resolution settings:
 - 1440x1440 dpi
 - 2880x2880 dpi
- These two resolutions are especially useful for OneBit and Dot Creator applications.





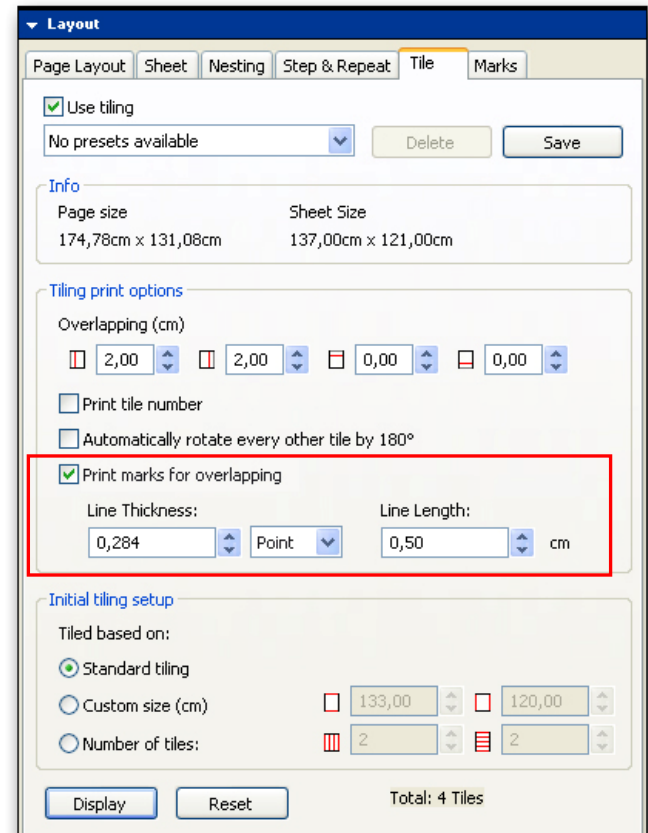
New features and changes

Production Option

Spot Color Option

2 Tiling: cut marks for overlapping

- What is the functionality?
 - Print cut marks for overlapping
- Where can I find it?
 - System Manager > Job Properties > Layout > Tile > Tiling print options
 - Job Explorer > Job Properties > Layout > Tile > Tiling print options
- What is the benefit?
 - Prepares the print for further finishing
 - Identifies the area for overlapping after printing



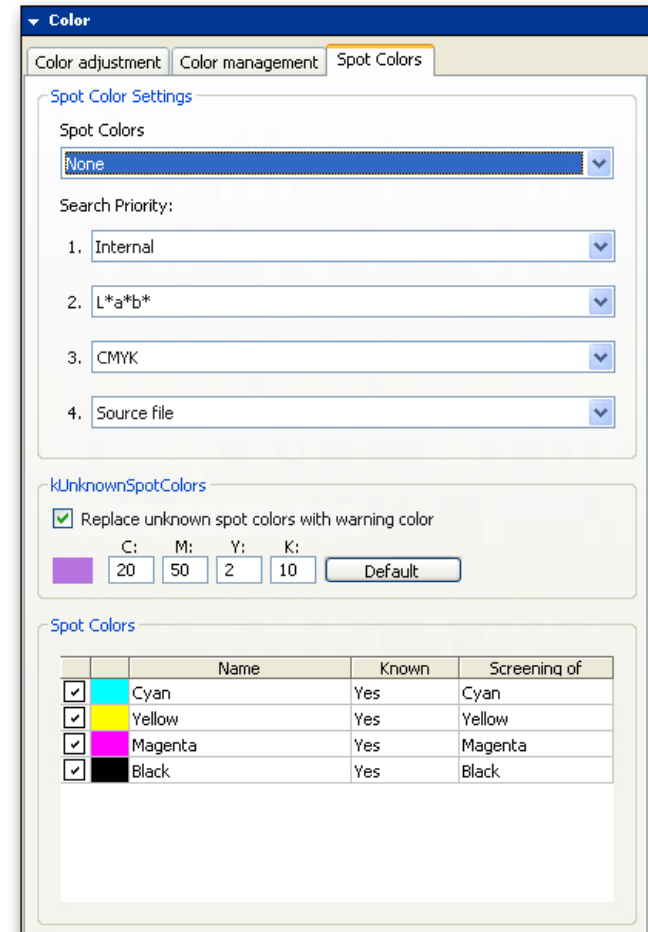
The screenshot shows the 'Layout' dialog box in the EFI XF v3.1.2 software. The 'Tile' tab is selected, and the 'Print marks for overlapping' option is checked and highlighted with a red box. The 'Line Thickness' is set to 0,284 and 'Line Length' is set to 0,50 cm. The 'Total: 4 Tiles' is displayed at the bottom right.

2 Changes within spot color tab

- What is the functionality?
 - Enhanced flexibility of search priorities
 - Using of source file definitions and list them as known spot color
 - Change default warning color

- Where can I find it?
 - System Manager > Job Properties > Color > Spot Colors
 - Job Explorer > Job Properties > Color > Spot Colors

- What is the benefit?
 - Increases usability of handling spot colors:
 - Use already defined spot color, no need to re-define them in the RIP
 - Provide search priorities for all kinds of applications
 - Change default color value to ensure you will notice there is a missing color





Supported measurement devices

EFI XF v3.1.2 – Measurement Devices



3 Overview of supported measuring devices with v3.1.2

		LinTool	Color Manager	Color Verifier	Spot Color Editor
EFI	Best Eye	X	X	X	X
	ES-1000	X	X	X	X
X-Rite	Eye One	X	X	X	X
	Eye One iO	X	X	X	-
	iCColor	X	X	X	-
	Spectroscan	X*	X*	X*	-
	DTP20	X	X	X	X
	DTP41	X***	X***	X***	-
	DTP41B	X	X	X	-
	DTP41T	X***	X***	X***	-
	DTP45	-	-	-	-
	DTP70	X	X	X	-
	Eye One iSis	X	X	X	-
Barbieri	Barbieri LFP	X	X	X	X
HP embedded Spectrophotometer	HPZ_X100	X	X	X**	-

* For supporting Apple Macintosh (PPC and MacTel) an USB/RS232 Adapter is required

** Measuring device supported by automatic Verification workflow only. Not supported with Verifier Stand Alone.

*** Not supported on Apple Macintosh