

# HP Latex 3x00 Printer Series

TECHNICAL NEWSLETTERS FROM CUSTOMER ASSURANCE

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**Date:** April 2018

**Impact/Severity:** High

**Region:** WW

**Support Area:** PLTW Firmware, Software, Upgrade/Migrate

**Audience:** Public

**Confidentiality:** Public

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## New FW, IPS and Print Care Update Package available – MR10.1

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New versions of firmware and software (IPS and Print Care) for the HP Latex 3x00 Printer Series are available to download.

**IMPORTANT:** HP strongly recommends that all the printers are upgraded to the new firmware and software as soon as possible. New printers may need to be upgraded during installation.

Remember that this upgrade is user installable, so please contact customers to advise them about this new release.

New release available from [www.hp.com/go/Latex3000/downloads](http://www.hp.com/go/Latex3000/downloads)

- Firmware: ALTAMIRA\_12\_01\_01.2.
- HP Internal Print Server (IPS): v2017.5.11.3.
- Print Care: v2.2.5.1

**IMPORTANT:** Ensure that the printer is connected and able to synchronize so that Print Care can get proactive update warnings from the HP servers whenever a bug has been fixed or a new version is available.

This is a General Availability version. It should be installed in all new and existing printers following the instructions below.

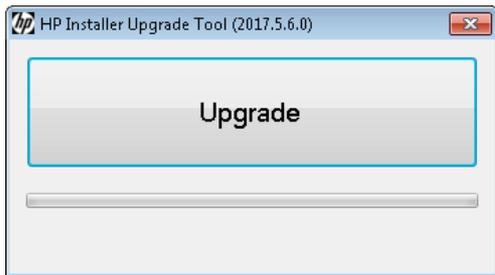
### Upgrade instructions

The three components (FW, IPS and Print Care) must be installed together. No other combination is supported. On this release, an upgrade tool that includes the Firmware, IPS software and Print Care has been developed.

### How to upgrade the Firmware, IPS and Print Care

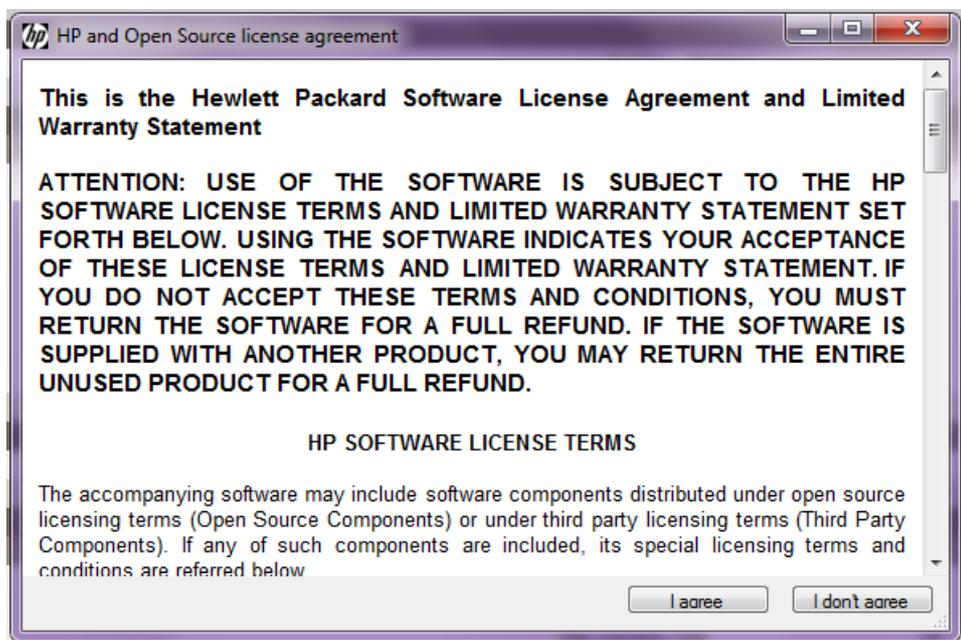
**IMPORTANT:** It is mandatory to unzip and execute the downloaded files from a USB memory device, otherwise a warning message will be showed.

- a. Download the UpgradeTool\_ALTAMIRA\_12\_01\_01.2\_IPS\_2017.5.11.3\_Prc\_2.2.5.1.zip file and unzip the contents onto a **USB memory stick**.
- b. Execute the **Upgrade Tool.exe** file and click the **Upgrade** button.



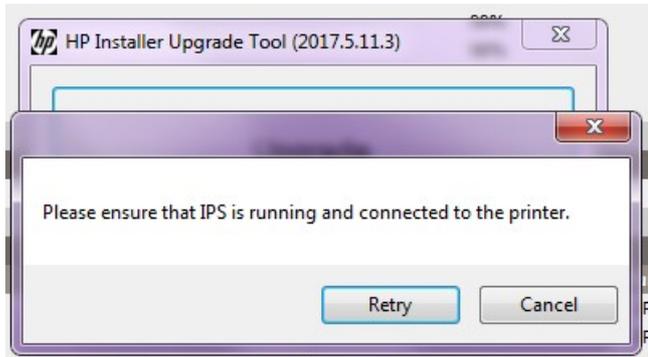
By running this file:

- FW version will be upgraded
  - The IPS, IPS services and HP Info Retriever (if installed) software will be uninstalled from the printer's built-in computer.
  - The new IPS and IPS services software will be installed.
  - The Print Care will be upgraded to version 2.2.5.1 and the Print Care patch will be installed.
- c. Before starts the process, the following window will pop up to accept the agreement. Press **I agree** to start the upgrade process or **I don't agree** to abort the upgrade process.

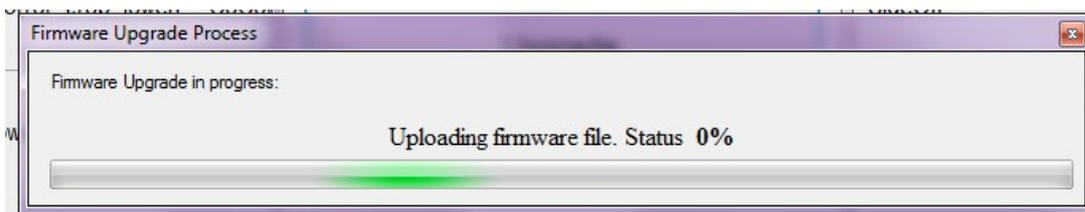


- d. Once that you accept the agreement the upgrade process will start. If IPS is not open, the following window will pop up. Press **Retry** after opening the IPS to continue with the upgrade, or **Cancel** to abort the installation.

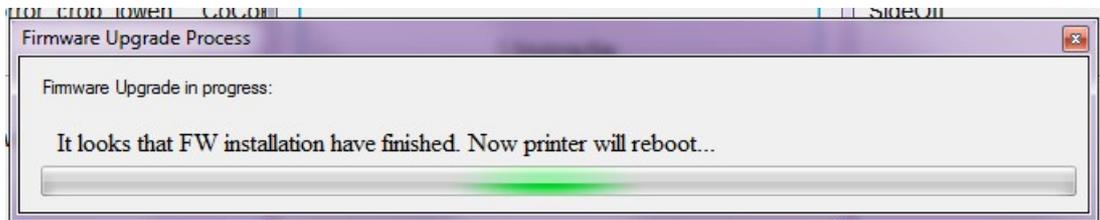
**Note:** if IPS is open before starts the upgrade process the following will not pop up.



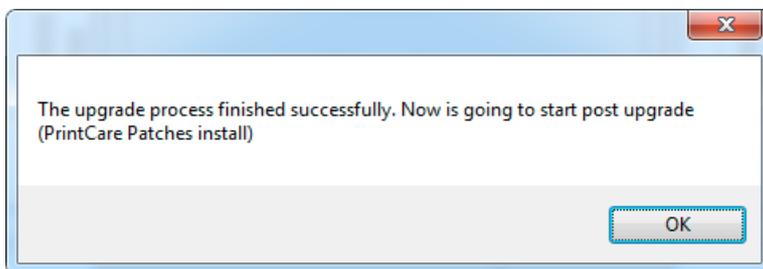
- e. Once IPS is running and FW upgrade process start you will see the following windows with FW upgrade report.  
**NOTE:** If printer has the latest firmware, the installer skips the firmware upgrade step.



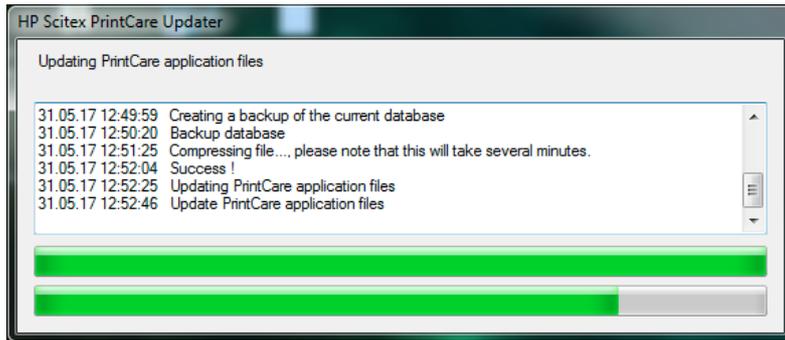
- f. Once the FW upgrade have finished and the printer start to boot you will see the following window before IPS and PrintCare upgrade process starts



- g. Once the IPS, IPS Services and Print Care upgrade is completed, the following window will pop up. Press **OK** to continue with the Print Care patch installation.

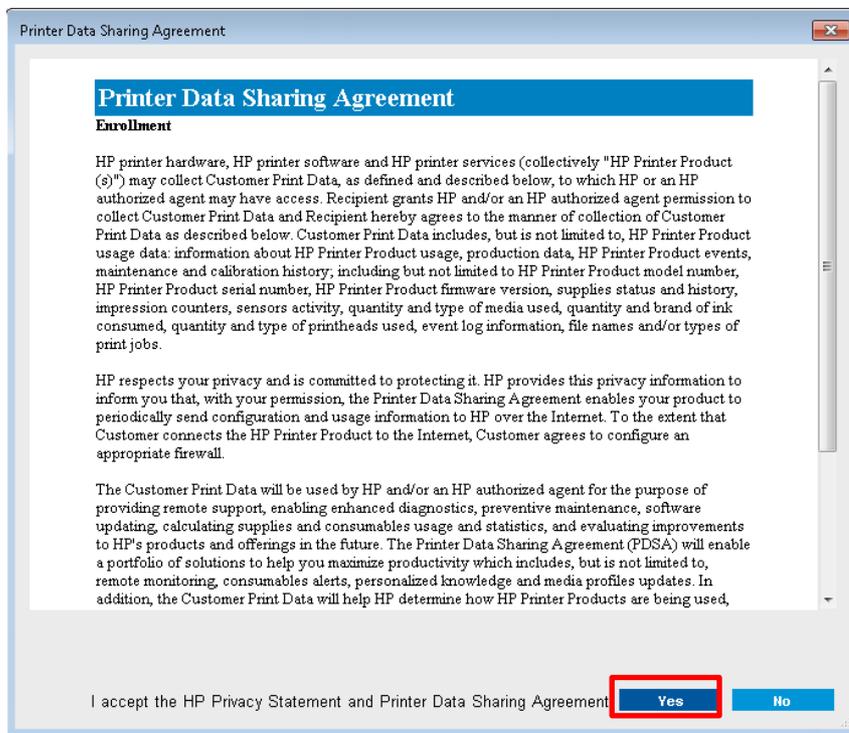


- h. During the installation of the Print Care patch, the following window will appear. Once the installation is completed, the window will be closed automatically.



- i. Once the installation process of IPS is completed, open the IPS application. At the first boot, the Printer Data Sharing Agreement (PDSA) window will appear.

HP strongly recommends enabling this function in order to take advantage of the info retriever functionalities, and faster and better remote support.



## Release notes

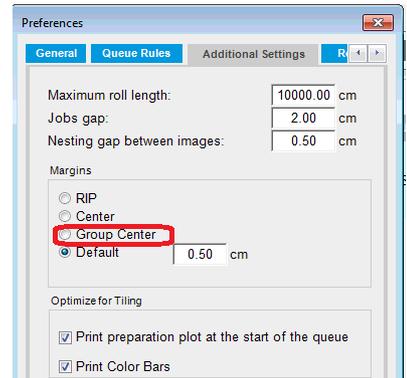
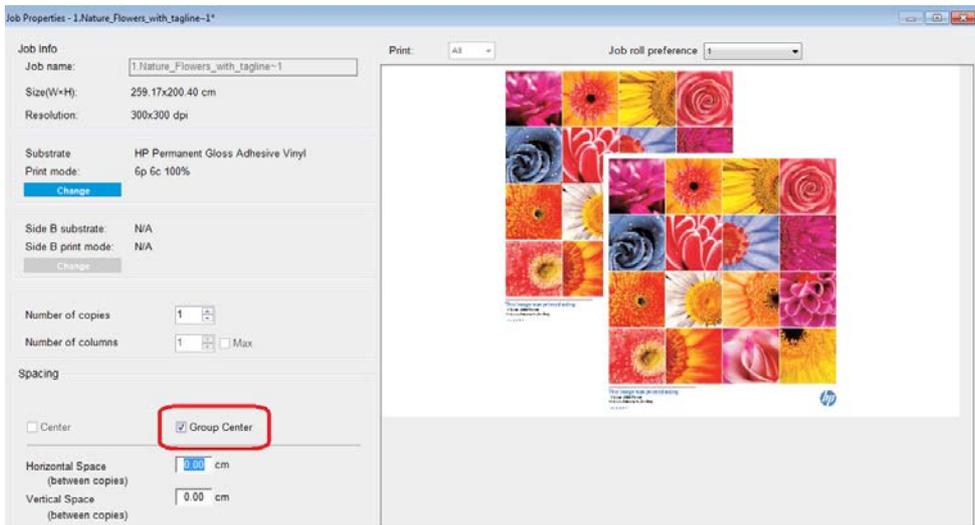
The MR10.1 release includes the following improvements and new functionalities with respect to the previous versions.

### A. New functionalities:

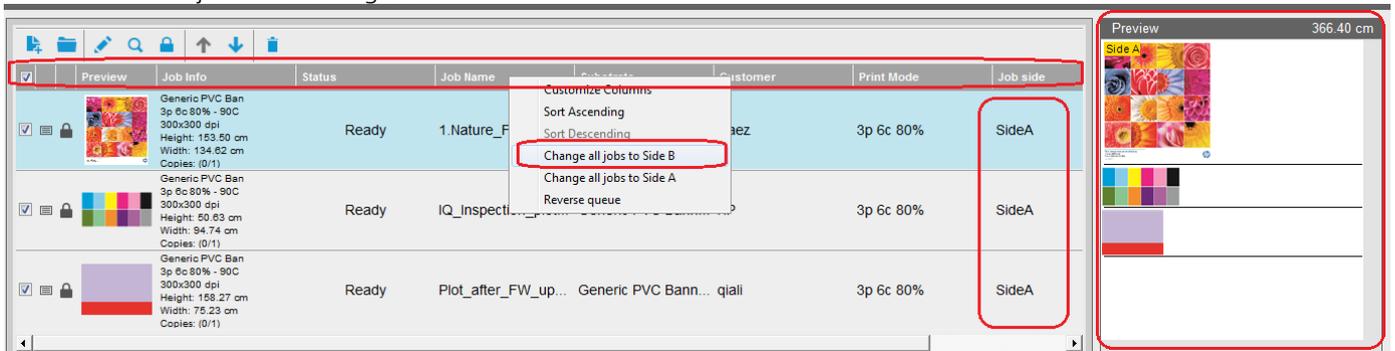
- **Group center**, option to move the content of a nested job to the center of the substrate media, without rearranging the content. Check below the differences between “Center” and “GroupCenter”

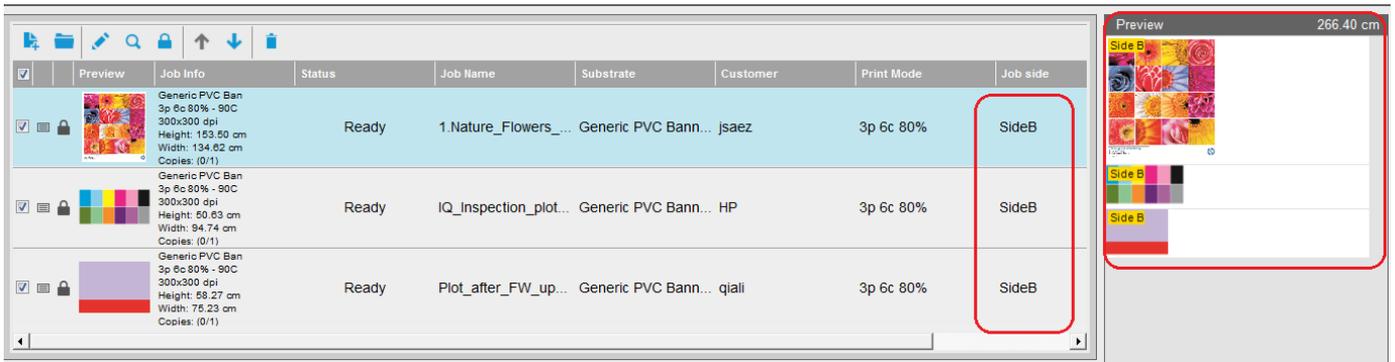


The new option can be found inside: “Job Properties” and “Tools > Preferences > Additional Settings tab”

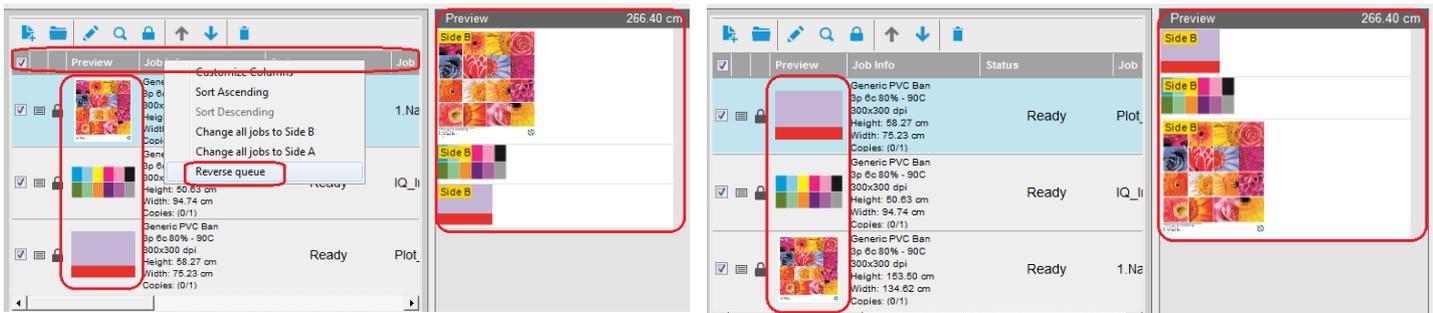


- Double-sided Block-Out (DSBO) improvements. New functionalities included to manage the queue prior to print the Side B:
  - **Modify multiple images side at once:** Right click on queue bar and select Side A or B to change all the jobs with a single click

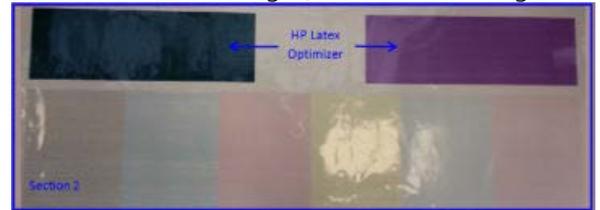
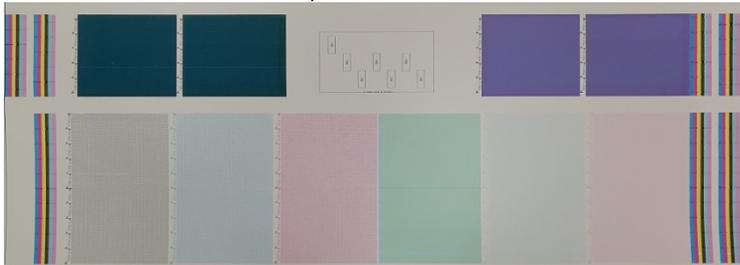




- Reverse the queue : Right click on queue bar and select “Reverse queue”



- New nozzle health plot. Check below the differences between new (left) vs old (right, new one at the right side)



- Image quality inspection plot for troubleshooting [Appendix 1 –](#)

## B. Bug fixes:

- Improvements to prevent the **SE 61.02** due to E-box performance issues.
  - Memory management has been improved during the manual printhead alignment.
  - While printing CLC plot
- 79:04 mitigation
  - While performing a manual printhead alignment
  - Related to the cartridge replacement
- Ink and substrate counters fixes
  - Ink counter was not accurate enough, in Printcare and Mobile App, when a job was cancel due to end of roll
  - Discrepancies on the ink consumption between Printcare and Mobile App

- Reprints of a job could report a wrong substrate consumption on Printcare
- Localization mistakes on Printcare. An error message could be showed when the language was not set to English.

## Appendix 1 – Image quality inspection plot

The Image Quality Inspection Tool is designed to provide a guided troubleshooting process for users facing banding issues, especially horizontal banding. The tool consists of two parts: an image to print, and a guide for the troubleshooting process.

The image consists of 12 solid area fills of 7.62 cm x 22.86 cm (3 x 9 in). The six rectangles in the top row are printed by a single ink each, and the six rectangles in the bottom row are secondary or tertiary colors printed using more than one ink. Note that colors in this image may differ from the ones expected. This is a desired behavior, since this image is not used to verify color accuracy.

This plot can be printed from the Internal Print Server in the Printer menu.



When facing banding issues, print the Image Quality Inspection Plot from the Printer menu: go to Printer > IQ Inspection > Add New Job. This will add a job to the print queue. To print it, edit the details of the job to select the substrate and print mode you want to check. Once the plot has printed, start the troubleshooting process. See the Image Quality Troubleshooting Process image at the end of this section for a summary diagram of the troubleshooting process.

1. Determine if the banding in the image is caused by aeroworms. Aeroworms are thin bands with higher density than the surrounding area that appear randomly and are not continuous across the substrate.



To correct this kind of non-uniformity:

- Increase the number of passes
- Reduce the ink density

- Check the carriage beam position
  - Check the aerosol filters
2. If the banding is not caused by aeroworms, continue with the following procedure:
- a. Horizontal banding
    - i. Banding present in all colors:
      - ▲ Check the Substrate-Advance Compensation and calibrate if necessary.  
(Printer menu > Advance calibration ...)
    - ii. Banding in one or more colors of the top row:
      - a. Execute a check and clean routine, print the printhead status plot and check the number of blocked nozzles.
      - b. If the number of blocked nozzles is roughly greater than 300 in any printhead, perform a hard cleaning routine, selecting the colors affected.
      - c. After executing the cleaning routines, reprint the printhead status plot, the image quality troubleshooting plot, and check the current state of the printheads (expect to see less nozzles clogged) and of the banding. If banding is still visible, increase the number of passes.
      - d. If none of the above work, replace the printhead that caused the banding (the one with most nozzles clogged).
      - e. If the problem persists after replacing the printhead, consider it may be a substrate compatibility issue.
    - iii. Banding in one or more colors of any row:
      - a. Execute printhead alignment and recheck uniformity with the Image Quality Troubleshooting Plot.
      - b. Execute check and clean, print the Printhead Status Plot, and check the number of blocked nozzles. If the number of blocked nozzles is greater than 300 in any printhead, perform a hard cleaning routine, selecting the colors affected.
      - c. Check the Substrate-Advance Compensation and calibrate if necessary.
      - d. Change the type of mask and/or increase the number of passes.
      - e. Reduce the ink density.
      - f. If the problem persists after all the corrective actions, consider it may be a substrate compatibility issue.
  - b. Vertical Banding
    - i. Wide bands:
      - a. Execute printhead alignment.

- b. Check carriage beam position.
  - c. Decrease curing temperature to reduce deformation.
  - d. Change from 4 to 6 colors to reduce grain.
  - e. Check substrate settings (vacuum and tension).
  - ii. Microbanding (vertical high-frequency lines, less than 2mm [0.08 in] wide):
    - ▲ Print the Printhead Alignment Plot to see the printhead responsible, and replace it.
3. After finishing the troubleshooting process, delete the image quality inspection job from the queue, and keep the files on the disk.



**NOTE:** For more information on print quality troubleshooting, see the [Advanced print-quality troubleshooting on the User Guide](#).

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# Image Quality Troubleshooting Process

HORIZONTAL BANDING		
<b>Banding visible in...</b>		<b>ALL COLORS</b>
<b>Corrective action...</b>		<ul style="list-style-type: none"> <li>Substrate-Advance Compensation</li> </ul>
<b>Banding visible in...</b>		<b>ONE OR MORE COLORS OF THE TOP ROW</b>
<b>Corrective action...</b>		<ul style="list-style-type: none"> <li>Check and Clean + Printhead Status Plot</li> <li>Printhead Hard Clean</li> <li>Increase number of passes</li> <li>Replace Printheads</li> </ul>
<b>Banding visible in...</b>		<b>ONE OR MORE COLORS OF ANY ROW</b>
<b>Corrective action...</b>		<ul style="list-style-type: none"> <li>Printhead Alignment</li> <li>Check and Clean + Printhead Status Plot</li> <li>Printhead Hard Clean</li> <li>Substrate-Advance Compensation</li> <li>Change type of mask</li> <li>Increase passes</li> <li>Lower ink density</li> </ul>

VERTICAL BANDING	
<b>Banding visible in...</b>	
<b>Corrective action...</b>	<b>ANY COLOR</b> <ul style="list-style-type: none"> <li>Printhead Alignment</li> <li>Scan-beam height</li> <li>Decrease curing temperature</li> <li>Change from 4 to 6 colors</li> <li>Check media settings (vacuum and tension)</li> <li>If microbanding, replace printhead</li> </ul>

AEROWORMS	
<b>Non-uniformity visible in...</b>	
<b>Corrective action...</b>	<b>ANY COLOR</b> <ul style="list-style-type: none"> <li>Increase passes</li> <li>Reduce ink density</li> <li>Check printhead-to-rib spacing</li> <li>Check aerosol filters</li> </ul>