HP Indigo Print Care Print Quality Assistant User Guide



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1 Overview

The Print Quality Assistant is designed to provide a structured and guided process for troubleshooting and resolving print quality issues on HP Indigo Digital Presses.

The Print Quality Assistant consists of two key parts:

- Print Quality Defect Selection Interface helps the user to correctly identify the type of print quality defect at hand through a menu of defect types with sample images and descriptions.
- Print Quality Troubleshooting Checklist provides the troubleshooting instructions for a specific class of print quality defects using diagnostics, wizards, and electronic help entries.

The figure below shows the Print Quality Defect Selection Interface of the Print Quality Assistant and describes each of the important areas.



Figure 1-1 Print Quality Defect Selection Interface

Main Print Quality Categories: These categories represent a general class of print quality issues. Select the category to 1 display a list of sub categories (Callout 3) which allow you to precisely identify the defect type. 2 Category Description: This is a description of the selected main print quality category. Use the description to help identify if that category matches the print quality defect you observe. 3 Print Quality Subcategories: These categories group the defects based on how often and how uniformly the defect occurs on the printed page. There are up to three different subcategories. Choose the subcategory that most closely matches your print quality defect and examine the defect samples in that category to further isolate the print quality issue. Print Quality Defect Samples: These defect samples provide more precise descriptions of print quality defects. Each 4 sample provides an image and a description. Select the defect sample that most closely matches your print quality issue and click Continue to begin troubleshooting. 5 Print Quality Defect Description: This is a description of the selected print quality defect sample. Use the description to help identify if that defect sample matches your print quality defect.

2 Troubleshoot a print quality issue

When using the Print Quality Assistant to resolve a print quality issue, the troubleshooting process should follow the general outline provided below. See <u>Main troubleshooting steps on page 4</u> for stepby-step instructions.

- 1. Identify the defect: the Print Quality Defect Selection Interface divides all observable print quality defects into five top-level classes. Select the class that most closely matches the print quality issue.
- 2. Identify the defect subcategory: each top-level class is further subdivided into one of three distinct subcategories to provide more fine-tuned troubleshooting instructions. These categories group the defects based on how often and how uniformly the defect occurs on the printed page.
- 3. Select a specific defect type: Each defect sample is accompanied by an image and a description of the defect. Select the defect type that most closely matches the print quality issue and click Continue.
- **NOTE:** Please read carefully the descriptions of main categories, subcategories, and the specific defect types in each subcategory. The defect you observe may not look similar to the sample images provided by the Print Quality Assistant. However, if the description matches your defect then choose that sample to begin troubleshooting. The sample images only represent one of many possible renditions of the described defect.
- 4. **Troubleshoot and resolve the issue**: the Print Quality Assistant then displays a checklist which represents the tasks that should be completed to resolve the print quality issue. Perform each task in order until the issue has been resolved.
- NOTE: In some cases, the Print Quality Assistant cannot identify the cause of the print quality issue or may discover a cause that is beyond the user's ability to resolve. It is recommended in these cases to contact HP support for further assistance.

Main troubleshooting steps

1. To access HP Indigo Print Care Print Quality Assistant directly, click on **Main Menu**, then click on **Problem Handling**, and then **HP Indigo Support**.



Figure 2-1 Navigating to the HP Indigo Support screen

2. The HP Indigo Print Care Support screen displays. Click Print Quality Assist.

Figure 2-2 HP Indigo Support screen



- 3. The Print Quality Assistant displays. The diagnostics are organized into print quality categories. Click on an item in the Print Quality Categories list to view a list defect types related to the selected main category. The defects are grouped into three different subcategories:
 - Defect always occurs at the same place on substrate
 - Defects appear cyclic with uniform space on the substrate
 - Defect dispersed randomly on substrate

The subcategories group the defects based on how often and how uniformly the defect occurs. Each subcategory lists several defect type samples. Select a defect type by clicking on it. A detailed description of the defect type is displayed at the bottom of the panel. Choose the defect type which best describes the print quality issue. To access the diagnostics for the selected defect type, click **Continue**



Print Quality Assist				×
Print Quality Categories	Sub category1: Defect aways	8		
Lines In Fried Direction	occurs at the same place on substrate.			
Line Across Feed Direction				
Stains and Marks			Λ	
Image Memory, Registration and Screen Pattern		101. Narrow line(5)	102. Line(s) on heavy coverage	
Smearing Haze and White Spots			Boruil down for more images	
Long marks in feed direction - lines, scratches, streaks, etc.	103: 2-10 equally spaced kines	104. Jeans texture		Ø
			Cortera	

- NOTE: Click on the magnifying glass in the corner of each image to view a higher resolution image of the selected subcategory sample screen shot.
- 4. The Diagnostics list for the selected print quality defect displays. The diagnostics are listed in the order they should be executed. HP recommends performing each diagnostic in order to determine the cause of the issue. The diagnostics list may present several different types of actions to take.

WOTE: For some defects, the Diagnostics list may display Print the Assistance Job as the first task. In these cases, the wizard is listed first as a way to identify which one of the tasks on the diagnostic list should be performed. In these cases, run the wizard and then proceed next to the task recommended by the wizard results. Click **Run Diagnostics** on that task to go to the pertinent diagnostics troubleshooting list. See Use the Assistance Job wizard on page 8 for more information.

	Flow streaks station 1	Action
6	Run Ink Cabinet Station1 diagnositc	Run Diagnostics
	Print a proof of customer job to check if defect fixed	2
1	Run BID1 diagnostic	Run Diagnostics
着	Print a proof of customer job to check if defect fixed	2
ä.	Clean the BID	8
1	Print a proof of customer job to check if defect fixed	2
1	If defect remains, replace BID	😭 Run Wizard
10	Print proof	9
箚	Contact customer care	

Figure 2-4 Print Quality Troubleshooting Checklist

- Run Diagnostics Clicking Run Diagnostics takes you to another diagnostics list with additional detailed steps to follow. Follow those diagnostic steps and then close the window to return to the current list and continue running additional diagnostics. In some cases, a diagnostic test is available and clicking **Run Diagnostics** takes you directly to the test screen. Follow the instructions on the screen and click **Finish** when the diagnostic test is complete.
- **Help** Click location of the list. The help topic related to the diagnostic item on the list. The help topic provides information on how to conduct the diagnostic.



Figure 2-5 Online Help screen

Run Wizard - Click Run Wizard to run a wizard that steps you through a diagnostic process such as printing a diagnostic test (see Use the Assistance Job wizard on page 8) or replacing a BID.

- NOTE: The press may need to meet specific preconditions for certain diagnostics. If a precondition is not met, a message displays and the diagnostic does not run. Follow the instructions in the message to meet the stated condition before continuing with the diagnostic. As an example, a message may display stating "Machine state should be Standby Go To Standby" if the press must be in Standby mode for the diagnostic. If a similar message displays when running a diagnostic, set the press in the required mode before continuing.
- 5. Work down the diagnostic list performing each action in order. After each diagnostic action, run another print test to verify if the print quality issue has been resolved. If the print quality issue still exists, mark the diagnostic action as done and move to the next one on the list. If you get all the way to the end of the list without resolving the issue, contact HP customer care for more assistance.

Use the Assistance Job wizard

When using the Print Quality Assistant to troubleshoot an issue, the Assistance Job wizard often appears in the checklist as a part of the troubleshooting process. The wizard prints sample pages from the press and then prompts the user to enter values based on the result of the printing. The entered values help the Print Quality Assistant to identify the cause of the print quality issue and recommend which troubleshooting steps to perform next.

When the Assistance Job wizard screen displays, click Print to print the sample job. 1.

Figure 2-6 Print Quality Defect Interface 1. Run Run 2. Enter Value nce job and answer questions folk 3 Retrit Press Print button to print the job Print 300 sec. Expect delay of about half a minute before substrate is

- 2. Collect the printed pages from the press and then fill in the form based on the result of the printing. Select the problematic color from the drop-down and then place a check mark next to the most relevant defect description. When you are done, click Apply.
- WOTE: If you are having difficulty filling out the form based on the sample pages, click 😰 to display a help topic about the Assistance Job wizard.

Lines in fee	ed direction correction wizard
1. Run	Enter values
). Results	Inspect the pricted sheets and choose the relevant defect. See Help.
	1. The defect appears most strongly only in one color gray prints, the lines are long and continues 2. The defect appears most strongly only in one color gray prints, the lines are shost and non continuous 3. The defect appears most strongly in 4 colors Gray 20 and weaker at some of the single color Gray 20
	4. The defect appears strong in 4 colors Gray 80 and may be weak at 4 colors Gray 20 5. None of the above Apply

Figure 2.7 Print Quality Defect Interface

3. The results screen displays. The results may vary depending on the values entered in the previous step. Follow the on-screen instructions and continue to the Print Quality Troubleshooting Checklist to finish troubleshooting the print quality issue.

Run		
Enter values	Results	
Results		
	Magenta BID Streacks. Close wizard and continue with step 2. 'BID Streacks.	eaks' in the checklist

Figure 2-8 Print Quality Defect Interface

3 Defect types

There are many different types of defect types that can affect print quality. Some print quality issues may consist of more than one defect type. When using the Print Quality Assistant, you may encounter terms such as "Fog" or "Image Memory" which are used to describe certain types of defects. The table below provides specific descriptions and sample images of these terms. Use the table below to help identify the print quality issue you are troubleshooting when using the Print Quality Assistant.

Defect Type	Description	Sample Image
Background	White cloudy empty areas appear on the page. This indicates that ink is not being applied correctly to some parts of the page. The clouds can vary in size, shape, and location.	
Image Memory	Memory, ink remains, difference in OD or registration problems cause unintended images or copies of images to appear in the output.	

Defect Type	Description	Sample Image
Vertical lines	Vertical lines appear on the page. These lines can be cause by ink streaks or scratches in the paper from a mechanism in the media path.	
Horizontal lines - Cyclic Banding	The banding appears three or more times on the page with consistent spacing.	
Horizontal Lines - Random Banding	The bands appear at random locations with random consistency on the page.	

Defect Type	Description	Sample Image
Cover problem	The ink is not sufficiently covering the page. The ink is too thick or too thin on areas of the page.	
Staining	Consists of any kind of spot-like marks with higher or lower OD with respect to the image.	



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