

# HP Indigo Labels & Packaging Substrate Certification Program

RIT's HP Indigo Substrate Certification Program enables substrate manufacturers, suppliers, and HP Indigo digital press owners to evaluate substrate compatibility with HP Indigo Labels & Packaging Digital presses.

The substrate certification procedure incorporates several procedures. After passing a short initial screening evaluation, the substrate is passed on for a more comprehensive evaluation looking at the performance of the particular substrate within the press. This checks for:

## Runnability

- the ability of the substrate to run smoothly through the press.

## Ink-transferability

- the quality of ink transfer from the blanket to the substrate as reflected in highlight dots, thin lines, heavy images and image edge integrity.

## Blanket-substrate compatibility

- the interaction between the substrate and the blanket might cause a 'Blanket Memory' effect, reflected in gloss differences between solids and background areas of the previously printed image.

## Blanket-temperature operating window

- the ability of the substrate to perform through a wide range of blanket temperatures. The wider the blanket temperature range, the greater the substrate's compatibility.

## Ink-substrate interaction (as reflected in):

- the degree of ink fixing to the substrate; the adhesion of the image to the substrate
- the resistance of the ink layer to abrasion (application dependent)
- the degree of flaking of the ink layer which reflects the printed substrate's ability to withstand various post-press operations (optional test).

Once completed, a substrate's compatibility is mapped, allowing prospective users to decide whether the substrate conforms to their needs. A comprehensive report is then generated for every tested substrate and provided to the customer.

## Scheduling

Scheduling depends on facility availability. Attempts will be made to accommodate all scheduling needs.

To schedule qualification activity, please contact:

Barbara Giordano  
Operations Manager, Printing Applications Laboratory  
Rochester Institute of Technology  
66 Lomb Memorial Drive  
Rochester, NY 14623  
Tel: (585) 475-2687  
Fax: (585) 475-2690  
E-mail: bagter@rit.edu

## HP Indigo 3 Star Rating

Substrate certification 3 star rating displays substrate performance levels that are determined during product testing. It is defined under three categories: runnability, compatibility, and ink fixing (adhesion). Each substrate displays a given star rating in each category. For more information related to the 3 star rating system, please refer to the chart below.

Details of certified substrates will be published so HP Indigo users can develop awareness of approved materials and buying sources. Certification is valid for 3 years, at which time a successful screen evaluation will recertify for an additional 3 years.

RIT's Printing Applications Laboratory also provides a range of additional services to HP Indigo supplier sites, including hotline telephone support on substrate issues. Please contact (585) 475-2687 for assistance.

Criteria (customer/supplier view)		☆☆☆	☆☆	☆
Measure		Best performing substrates	Recommended substrates	Good substrates
<b>Runnability, scalability, web-breaks, jams, snaking, wrinkling, telescopic, bleeding, high friction, etc.</b>	Evaluate during the entire duration of the test procedure	Perform successfully at high speed (2x sep.) and default speed (4x sep.) without substrate issues. Scalability wizard test must perform successfully.	Perform successfully at high speed (2x sep.) and default speed (4x sep.) without substrate issues. Scalability wizard test must perform successfully.	Perform successfully at high speed (2x sep.) and default speed (4x sep.) without substrate issues. Scalability application independent.
<b>Ink fixing/adhesion</b>	Tape peeling test for CMYK and CMYK+W for transparent and metalized at 15 minutes and 60 minutes interval.	>90% ink adhesion	>80% ink adhesion at 15 minutes. >90% ink adhesion at 60 minutes.	>70% ink adhesion at 15 minutes. >80% ink adhesion at 60 minutes.
	Flaking test at 15 minutes.	<1mm on 400% ink coverage	<1mm on 300% ink coverage	<1mm on 200% ink coverage
<b>Blanket compatibility</b>	Blanket cleaner pages after 1000 impressions	2nd blanket cleaner page clean	3rd blanket cleaner page clean	3rd blanket cleaner page clean



**Best performing substrates.**

Fewer print cleaner pages needed. No blanket memory at least up to 5k impressions.



**Recommended substrates.**

Some print cleaner pages needed. Slight blanket memory may be seen at 5k impressions.



**Good substrates.**

Print cleaner pages generally needed. Some blanket memory may be seen at 5k impressions. Test substrates failed under high speed (2x sep.) runnability are solely certified for default speed (4x sep. or more). Restricted from high speed runnability and displayed under comments on HP Indigo Media Solutions Locator.



### Please Note

The HP Indigo Labels & Packaging Substrate Certification Program solely validates print performance on HP Indigo presses and does not indicate any form of finishing performance to end user requirements. It is the responsibility of the customer to validate a HP Indigo substrate is fit for purpose and to take the necessary actions with regards to finishing demands.

## HP Indigo Labels & Packaging Substrate Certification Program Information

### Fee

	Labels & Packaging
Screen Evaluation	\$650.00 per substrate
Full Evaluation	\$975.00 per substrate
Dual Evaluation	\$1625.00 per substrate*

\* Successful full evaluation on the ws6000 and screen evaluation on ws4050 results in certification on both devices  
Full evaluations that fail during the screening stage will be charged the screening fee.

### Cancellation Policy

Cancellations within ten working days of the scheduled certification date will incur a four hour charge; cancellations within five working days, an eight hour charge will be assessed. If the day can be utilized by another client, there will be no cost incurred.

### Shipping

All shipments must be coordinated through Barbara Giordano and be scheduled to arrive at RIT at least 3 days, but no more than 2 weeks, prior to the scheduled certification date. This allows the print media to acclimate to the laboratory environment.

### Packaging

Materials shall be fully wrapped with moisture-barrier packaging material and protected against shipping damage. \* Please ship rolls exceeding 30"/.75 meters in diameter on skids in "rolling position."

### Labeling

The samples must be clearly labeled with:

- a. Company/Contact Name
- b. Name of the substrate
- c. Grain direction for sheet material
- d. Grammage/Basis Weight/Caliper
- e. Suppliers reference or batch number

This information must be consistent with that on the Substrate Data Sheet.

Print media should be shipped to:

Barbara Giordano  
CIMS Building, Dock #5, Room 1530  
Printing Applications Lab  
66 Lomb Memorial Drive  
Rochester, NY 14623

For material originating from outside the U.S., the shipment must include an original commercial invoice, and/or a bill of lading. Please list DHL Global Forwarding on the AWB as the NOTIFY PARTY.

DHL contact Information:

Michelle Murtagh  
Customs Brokerage Agent  
DHL Global Forwarding  
+1 585 512-2209  
+1 585 436-4205  
Michelle.murtagh@dhl.com

**Shipping and Roll Disposal Fees:** Shipping samples will be billed to the customer, along with an \$8 per roll disposal fee, upon completion of the certification.

## RIT/HP Labels & Packaging Resources: Specifications (by Press)

### HP Indigo ws4050 Labels & Packaging Digital Press (web) Specifications

Substrate Dimensions:

Substrate Thickness: 12-350 microns / .47-13.8 mils

Substrate nominal width: Max 330 mm; Min 305 mm (13" max; 12" min)

Core Diameter: 3" or 6"

Input roll max diameter: 1000 mm (or 40")

Linear Footage(LM) Required for full evaluation:

2000 m (or 6000 linear feet) per condition

Linear Footage(LM) Required for screen evaluation:

800m (or 2500 linear feet) per condition



### HP Indigo ws6000 Labels & Packaging Digital Press (web) Specifications

Substrate Dimensions:

Substrate Thickness: 12 – 450 micron / .47-17.7 mils

Substrate nominal width: Max 330 mm; Min 305 mm (13" max; 12" min)

Core Diameter: 3" or 6"

Input roll max diameter: 1000 mm (or 40")

Linear Footage(LM) Required for full evaluation:

2500 m (or 7500 linear feet) per condition

Linear Footage(LM) Required for screen evaluation:

1000 m (or 3000 linear feet) per condition



### To initiate the certification process:

Please visit the Printing Applications Laboratory website for hp media certification at

[http://printlab.rit.edu/services\\_hp.php](http://printlab.rit.edu/services_hp.php)

and follow the link to the online [HP Indigo Media Certification Program Application](#).

Once the form is submitted we will contact you to make all the necessary arrangements for the evaluation(s).