



Specialty Substrate Evaluation Report

Certified for
HP Indigo

| Supplier Information | |
|----------------------|---|
| Supplier Name | Catalina Graphic Films, Inc. |
| Supplier Address | 4855 West Harmon Ave., Las Vegas, NV, 89103 |
| Supplier Country | U.S.A. |

| Product Information | |
|-----------------------------------|--------------------------------|
| Product Name | White Hi Stat for HP Indigo |
| Product Category | Synthetic |
| Grammage (gsm) / Basis weight (#) | 390 gsm/238# |
| Thickness (microns/caliper) | 365 um/15 mils/0.015 in/15 Pts |

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|----------------------|--|
| Certification Number | RI7500-17-5091 |
| Certification Center | RIT |
| Date of Evaluation | 05/17/2017 |
| Evaluated on | HP 7500 |
| Certified for | 7500, 5000, 5500, 5600 multi-shot, 7000, 7600, 7800 & 7900 |
| Evaluation Process | Specialty Media |

| Evaluation | Measurement | Result | Grade (stars) | Comments |
|------------------------------|--|--------|---------------|----------|
| Runability | | | ★ ★ ★ | |
| Simplex | Number of Jams | 0 | | |
| Duplex | Number of Jams | 0 | | |
| Ink Adhesion / Fixing | | | ★ ★ ★ | |
| Peeling | 100% K in 4 color mode, % in remaining | 100% | | |
| | 400% YCMK 100% each color Visual Damage | 100% | | |
| Flaking | <1 mm, % Coverage | 400% | | |
| Blanket Compatibility | | | ★ ★ ★ | |
| Cleaner Pages | 1st clean page after 12K impressions | | | |
| White Ink Recommended | >80% after 10 or 60 min | N/A | | |
| Color Registration | CPR quality job | Pass | | |
| Evaluation Result | | Pass | | |

Comment Detail:

The substrate certification procedure incorporates several processes.

This checks for:

Runability:

The ability of the substrate to run smoothly through the press in various print modes.

Fixing:

Ink-substrate interaction as determined by: 1) The degree of ink adhesion to the substrate for standard applications as measured in a tape peel test of the image; and 2) The degree of flaking of the ink layer.

Blanket Compatibility:

Blanket-substrate interaction as determined by: 1) Ink-transferability, which is the quality of ink transfer from the blanket to the substrate as reflected in highlight dots, thin lines, heavy images and image edge integrity; 2) 'Blanket Memory' effects, reflected in gloss or density differences between solids and background areas of the previously printed image; and 3) Number of cleaner pages, in which blankets are routinely maintained by performing a self cleaning procedure ("cleaner pages") used to refresh the blanket's release layer.

Color registration (CPR):

The ability of the substrate to be printed with acceptable color-to-color registration in the four color process. Synthetic materials are generally more sensitive to CPR issues.

Star Rating

★★★ Best performing substrate: fewer print cleaners needed; no blanket memories at least up to 1.2K impressions.

★★ Recommended substrate: some print cleaners may be needed; slight memories may be seen up to 1.2K impressions

★ Good substrate: print cleaners generally required; some memories may be seen by 1.2K impressions.

| | | ★★★ | ★★ | ★ |
|--------------------------|--|---|------------------------|------------------------|
| | Measurement | Best-performing substrate | Recommended substrate | Good substrate |
| Runnability | Runnability | 1 jam or minor issues | 2 jams or minor issues | 3 jams or minor issues |
| Fixing | Peeling: 100% K, at 10 minutes | Visually NO damage (ignoring gloss changes) | >90% | >80% at one hour |
| | Peeling: 400% YMCK, 100% of each color at 10 minutes | Visually NO damage (ignoring gloss changes) | Any damage (visually) | Any damage (visually) |
| | Flaking guillotine at 5 minutes | <1 mm at 400% K | <1 mm at 300% K | <1 mm at 200% K |
| Blanket Compatibility | Cleaner pages OK after 1.2 K | 2nd cleaner page clean | 4th cleaner page clean | 6th cleaner page clean |
| Color registration (CPR) | CPR quality job | Pass/Fail | | |

The specialty test is a shorter test compared to the standard certification procedure, and is intended for media where low print volumes are expected. In addition to runnability, fixing and blanket compatibility, selected Print Quality parameters such as Color Plane Registration (CPR) are also evaluated. For certain substrates, particularly synthetics, special press procedures may need to be applied to obtain acceptable CPR.

HP Indigo customers must test per their specific application needs and determine if the media meets customer requirements.

This substrate is certified for the next two years from the date of evaluation, provided there is no change to the paper properties or production processes. At the end of two years from the original evaluation date, if there have been no changes in paper properties or production processes, the certification can be extended for another two years. After four years from the original certification date, a new certification is required.



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