Color and Proofing 18.1

What is new

David Harris
Product Manager
March 2019
Lean Profiling – profile without going on press!

- **Why?**
  - You need to change the ink (e.g., different supplier, slightly different hue)
  - The press or plate conditions changed (anilox, density, dot gain..)
  - You want to use a different ink in the profile for example Warm Red instead of Magenta because you have a batch of jobs using Warm Red
  - You could go on press and make a new profile, but this takes time and money. Sometimes you simply don’t have the time
Lean Profiling - How does it work?

- Take any press profile and replace the ink(s) with new inks†
- New inks can be defined in three ways:
  - Set the Lab value
  - Measure a solid patch
  - Use an ink profile (ink plus tints)
- Use the new profile in any or all of:
  - Proofing
  - Equinox
  - Automation Engine..

†Note: you can only replace an ink with one of a “similar” color – for example changing Magenta to a Red or Orange. You cannot change Magenta into a Green for example
Lean Profiling – How accurate is it?

- The more data you have, the better.
- But acquiring the data takes time
  - Or sometimes it just isn’t available
- Lean Profiling makes the best use of the data provided
  - And you can make the tradeoff
  - And the result is surely much better than not adjusting the profile at all!

<table>
<thead>
<tr>
<th>ACCURACY</th>
<th>EFFORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

- Best Measure ink with tints
- Better Measure solid ink
- Good Set Lab value

Amount of Data

56x12
Select optimum production method (EPM, CMYK...) while meeting color expectations

Guaranteed match between estimation and execution

→ Color system used for estimation and production is the same!!
## Color Preflight Report

<table>
<thead>
<tr>
<th>File Name</th>
<th>01_Red Wine Front.pdf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>28/01/2019</td>
</tr>
<tr>
<td>Time</td>
<td>16:41</td>
</tr>
<tr>
<td>Substrate</td>
<td>PE-WHITE</td>
</tr>
<tr>
<td>Press</td>
<td>HP Indigo WS6800</td>
</tr>
</tbody>
</table>

### Input Inks

- **201**: Pantone C
- **Vamish**: <unregistered>

### Process Color Checks

<table>
<thead>
<tr>
<th>Type of EPM Check</th>
<th>Value</th>
<th>EPM Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check for black gradients</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Check for images in black</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Check if the input file only contains a black ink</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Check if the TAC is more than (%)</td>
<td>280 %</td>
<td>✓</td>
</tr>
<tr>
<td>Check if the input file is missing the black ink</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Check for black objects smaller than</td>
<td>0.35 mm</td>
<td>✓</td>
</tr>
<tr>
<td>Check for black strokes thinner than</td>
<td>0.35 mm</td>
<td>✓</td>
</tr>
<tr>
<td>Check for black text smaller than</td>
<td>6 pt</td>
<td>✓</td>
</tr>
<tr>
<td>Check for rich black object or stroke</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

### Traffic light indication of best ink set(s)

- **CMY**: X
- **CMYK**: ✓
- **CMYKOGV**: ✓
PDF report includes spot color details

<table>
<thead>
<tr>
<th>Ink Name</th>
<th>Ink Set</th>
<th>dE</th>
<th>% C</th>
<th>% M</th>
<th>% Y</th>
<th>% K</th>
<th>% O</th>
<th>% G</th>
<th>% V</th>
</tr>
</thead>
<tbody>
<tr>
<td>348</td>
<td>CMY</td>
<td>0.09</td>
<td>0.973</td>
<td>0.259</td>
<td>0.969</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>CMYK</td>
<td>0.12</td>
<td>0.965</td>
<td>0.220</td>
<td>0.961</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>CMYKOGV</td>
<td>0.12</td>
<td>0.000</td>
<td>0.000</td>
<td>0.706</td>
<td>0.451</td>
<td>0.000</td>
<td>0.000</td>
<td>0.969</td>
</tr>
<tr>
<td>375</td>
<td>CMY</td>
<td>5.77</td>
<td>0.447</td>
<td>0.000</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>CMYK</td>
<td>6.22</td>
<td>0.471</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>CMYKOGV</td>
<td>3.32</td>
<td>0.000</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.561</td>
</tr>
<tr>
<td>389</td>
<td>CMY</td>
<td>3.89</td>
<td>0.153</td>
<td>0.000</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>CMYK</td>
<td>3.83</td>
<td>0.149</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>CMYKOGV</td>
<td>2.01</td>
<td>0.000</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.231</td>
</tr>
</tbody>
</table>

Detailed feedback on which job spot colors pass the gamut check, ΔE values and color builds
Using the Epson S80600 in Pack Proof

- Solvent ink proofer – prints on wide variety of substrates
- Ideal for proofing labels and flexible packaging with a white ink underprint
- Color gamut around 90% of Pantone book
  - Depending on substrate
  - Epson P-series gives a larger gamut, but it only prints on paper
- White ink support
- Metallic ink support
Superior quality control

- Device stability check for proofers and digital presses
  - Automatically adds extra patches to chart
  - Intelligently measures stability
  - Know what your device is capable of
  - Sets correct expectations on accuracy
- Proofing Strategy Check
  - End to end color accuracy report
  - Overall dashboard and detailed statistics
  - (New) export a report
  - Store the report as part of your QC workflow
Other value-added features

- Overprint Charts update
  - Create charts for any M mode
- Measurement in manual patch mode
  - When you know manual mode is needed
- Digital Printing strategy: Add Exceptions to Ink Book
  - Create an ink book of device-dependent references
- Set ΔE formula for digital printing strategies
  - Use your choice of formula when calculating spot color builds
- Edit profiled inks
- And many more…