

# Printer to printer color consistency

HP Inc. Internal test

April 2019



# TEST DATA

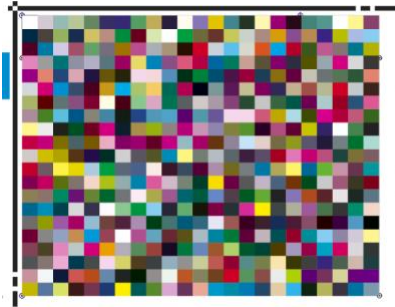
- **Printers:**
  - 3 printers HP Stitch S500 64inch and
  - 2 printers HP Stitch S300 64inch
- **Printheads:** Same batch
- **Paper:** Coldenhove JetCol High Speed (Same physical roll to avoid roll to roll differences)
- **Ink:** AR3
- **Printmodes:**
  - 4 pass 100% Ink Density for HP Stitch S500
  - 6 pass 100% Ink Density for HP Stitch S300
- **Textile:**
  - Aberdeen Fabric 6243 (uncoated) using transfer method
  - Aberdeen Fabric 6243 (coated) using direct printing method
- **Calendering conditions:** 205°C, 32 seconds
- **Spectrophotometer:** Barbieri LFP qb

# TEST DATA

- Printing workflow:

RIP: Ergsofot RIP version 15.xxx

Chart: CMYK OCTP chart (943 colors)



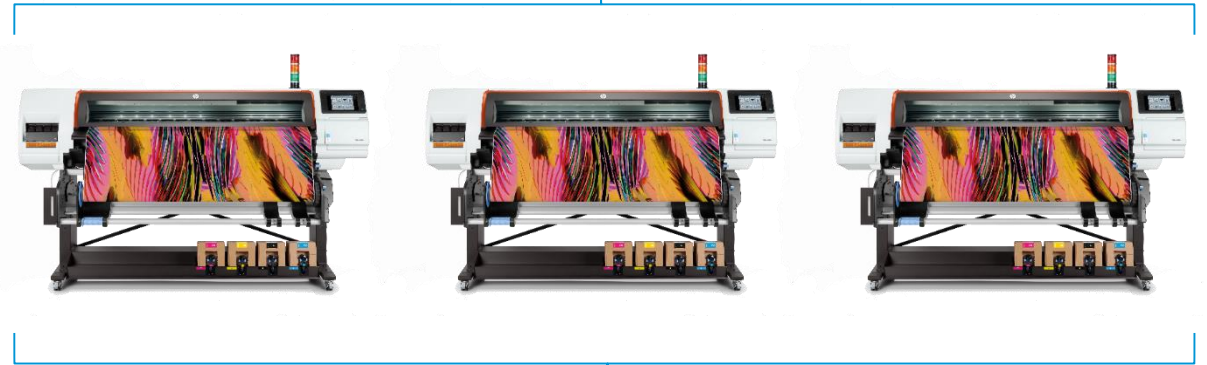
**Color Management:** No color management (to pinpoint individual ink channels in case of inconsistency)

# TEST PROCESS



4. Upload OMES from printer to cloud

5. Download OMES from cloud



1. Clone proper generic media
2. Run Color calibration (it creates a CLC reference)
3. Print OCTP Chart

6. Run Color calibrations
7. Print OCTP Charts

8. Calender all OCTP Charts at once
9. Measure them with the same spectrophotometer

# RESULTS

After calibrating 5 HP Stitch printers, the OCTP test charts were printed and calendered in a controlled environment.

The color data of each patch from every printer was compared against the average population of the 5 different HP Stitch printers.

The result was that **95% of colors were reproduced within 1.5  $\Delta E_{2000}$  color difference** against the population average.



keep reinventing