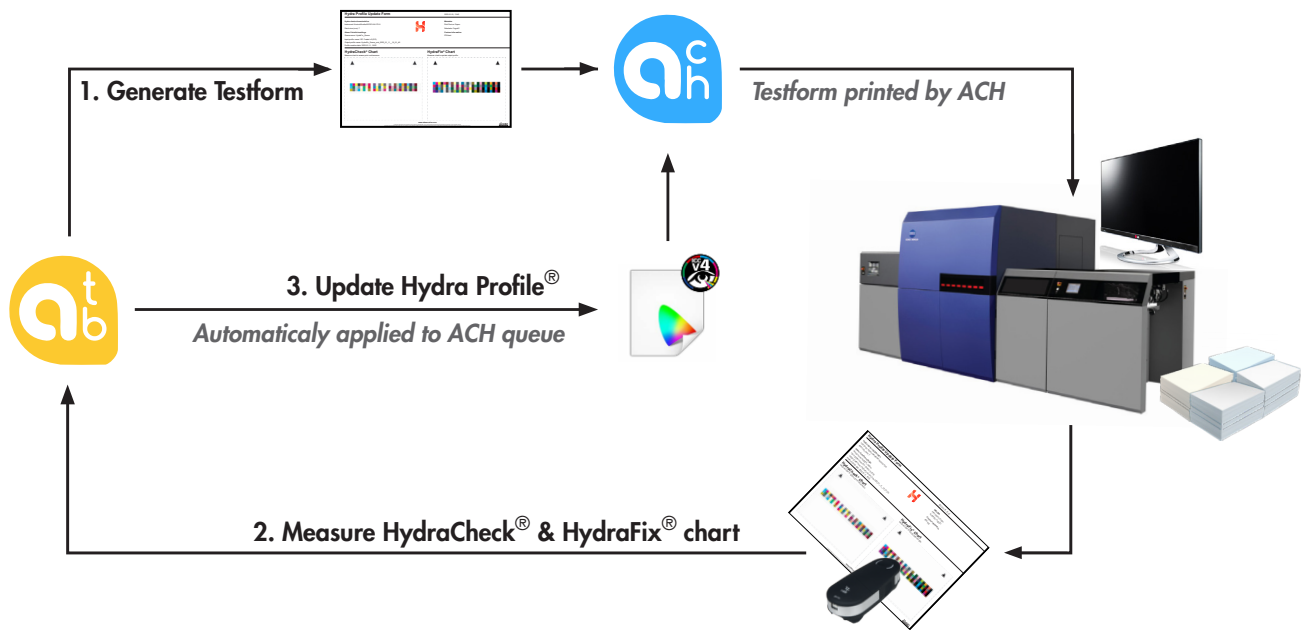


How to implement HydraFix® Profile Updater in a digital printing workflow



Introduction

HydraFix® technology's purpose is to update the printing condition of a digital device - **density/inkcut, dot gain/tonal curves, color tables/icc profile** - in one easy and quick operation.

HydraFix® Profile Updater module found in Alwan ToolBox (ATB) will guide you step by step into the entire profile update operation which should take **only a few minutes**.

The benefit of updating your digital press paper color setup with HydraFix® instead of doing it using the press manufacturer Digital Front End (DFE)/Controller protocol is that **you will only need 1 queue in ACH Alwan ColorHub (ACH) and 1 corresponding queue in digital press DFE/Controller for each substrate category, NOT every individual substrate**.

This will allow you to save more than one hundred hours per year that can be used for paid production instead of color maintenance.

A. Create a new paper category

Requirements

- Alwan ColorHub 8.0+
- Alwan ToolBox 4.0+
- A supported measurement instrument

Note:

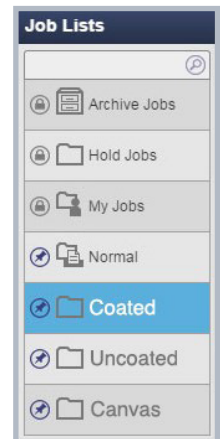
This protocol will illustrate HydraFix® implementation for coated paper, the same protocol can be used for other substrate categories that are supported by your press such as Uncoated, Canvas etc.

1. Digital press DFE/Controller:

- Create a Queue/Job that corresponds to a category of production substrate, for example, "Coated" paper
- For the "Coated" Job/queue, choose an existing or create a new paper setup/color configuration for coated paper
- If you are creating a new paper setup/color configuration, follow the DFE protocol and choose corresponding parameters as usual: Paper type - paper transportation - Printer calibration etc

Notes:

- *As a general rule, for this paper setup/color configuration that will be used with all coated papers, choose the thickest paper you have in stock. This will allow you to print later thinner paper with this same paper setup/color configuration without printhead positioning issue.*
- *If you have the choice of print quality, always use the highest one to achieve the largest gamut and the highest ink savings with this paper category, for example, choose High Quality instead of Standard or Economy mode... If your DFE protocol includes an optional ICC Profile creation, you may skip this part.*
- *Please turn off/uncheck all parameters that may affect printed colors: tonal curves, RGB/CMYK/Spot color management, purity options, etc.*



Outcome 1:

DFE/Controller has a reference "Coated" Job/Queue that will be used for all coated papers.

2. Alwan ColorHub:

- Install ACH 8.0 + Hydra Profiling® option (HydraFix® included)
- From ACH "Preferences" window - "Web Interface/Connectivity" tab, check the "Enabled" box



A. Create a new paper category

- From ACH "Queue Manager", create a new queue for a paper category, for example "Coated paper"
- Use the input profile that corresponds to your desired target, in this example: FOGRA51/PSO coated/Gracol...
- Do not check any "Purity" option
- Check the box under the 2 arrows, this will make this ACH queue visible to ATB:

Name	Priority	Enabled	↔	Valid
Coated paper	Normal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Outcome 2:

ACH has a "Coated paper" queue that will be used for all coated papers.

3. Alwan ToolBox:

- Install ATB 4.0 with HydraFix® Profile Updater module
- Launch HydraFix® Profile Updater



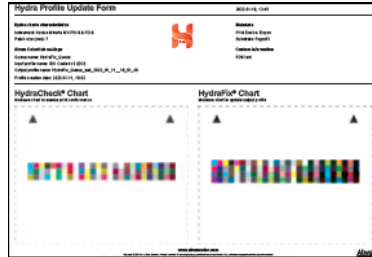
• Configuration

- Choose measurement instrument, Connect, Calibrate
- Choose ACH queue "Coated paper"
- Choose testform customization options
- Enter relevant metadata (used by the profile naming convention)
- Choose the naming convention for the new profile:
{PrintDevice}_{Substrate}-{Date:yyyyMMdd-hhmm}
- ↳ Generate Testform

A. Create a new paper category

- **HydraCheck® chart (optional step)**

HydraCheck® chart (on the left) is color managed and can be measured for conformance assessment of the current profile if desired.



- **HydraFix® chart**

HydraFix® chart (on the right) is not color managed, it is intended to be measured to update the print device profile.

- **Print Testform**

HydraFix® testform is in your ACH "Coated paper" queue/"Job Success" folder.

- Move or copy HydraFix® testform from ACH "JobSuccess" folder to your digital press Job/Queue "Coated"(1)
- Make sure that all curve and color management options are turned OFF
- Measure HydraFix® chart and build a digital press profile, ATB will automatically update ACH "Coated paper" queue with this production paper profile

Outcome 3:

ATB created a "reference" ICC profile for "Coated paper" queue which can be updated and optimized for any production paper.

B. Update profile for a new production paper

- 1 - Generate, print and measure HydraFix® testform as described above (3), Chosen ACH queue output profile is updated
 - 2 - Put production PDF in updated ACH queue input folder as usual
 - 3 - Copy/move color-managed PDF from ACH "Job Success" folder to digital press DFE Job/Queue as usual
- PS:** If production paper profile has already been updated recently, you can easily find it and select it as ACH Output ICC Profile.

You need more information about HydraFix®?
Please email us at sales@alwancolor.com