

# Digital Closed-Loop by Alwan<sup>®</sup>

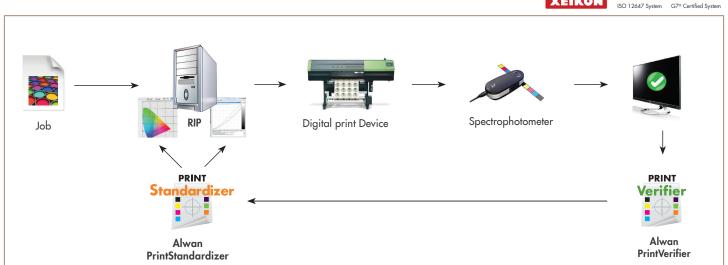


## PRINT THE RIGHT COLORS ALL DAY LONG ON ALL PAPERS









# **BENEFITS**

# PRINT STABILITY AND PREDICTABILITY

#### Save Time

No more time consuming linearisation, calibration and profiling operations after a paper or substrate change.

### **Boost Production**

Boost your facility productivity by 5-10% as no production device will be stopped for color mismatch reasons for more than few seconds.

## Make Money

Save money on maintenance, make money by printing more, and print better by matching  $G7^{\circ}$  and ISO job after job, day after day.



# **PROBLEM**

## PRINTING VARIABILITY

#### Device

Printing devices are not stable. Print head, print engine and many mechanical variables can move and make the device drift during the day, the output becomes unstable and unpredictable.

#### **Ambient Conditions**

Ambient temperature and humidity can vary and have an effect on the print engine and the substrate physical properties, this leads to significant color shift between jobs.

#### Paper and Substrates

Characteristics of papers and substrates of the same type can vary significantly between manufacturers, batches and weights. Calibration and ICC profile of previous batch does not work anymore, colors are suddenly off in the middle of production.

For color critical jobs, maintenance engineers have to calibrate and profile each device, each day, for each substrate.

Between 100 and 200 hundred maintenance and production hours are lost every year per device!

# **SOLUTION**

## **ALWAN DIGITAL CLOSED-LOOP**

Alwan Digital Closed Loop software Solution is easy to use, it does not require any technical skill to work perfectly.

You can continue using your spectrophotometer, control strip, printer RIP and working practices, no past investment is lost.

Alwan PrintVerifier (APV/X) is installed on the print device computer to monitor print conformance and send measurement files to Alwan PrintStandardizer (APS/X).

Alwan PrintStandardizer is installed on a computer that centralizes measurements arriving from any number of devices in a printing facility.

APS/X will automatically generate the required correction which will bring the device back in conformance without interruption of production.

APS/X adjustments can be applied by the click of a mouse. Depending on your RIP, you can choose one of the following forms:

- CGATS and XML files for DGC/TVI correction tables
- ICC DeviceLink Profile without color table (no color management applied on RIP)
- ICC DeviceLink Profile with color table (color management applied on RIP)

# IMPLEMENTATION: LINEARIZE/CALIBRATE - PROFILE - MAINTAIN WITH APV/APS

- Determine target TRC for Output device
- Output one or two rows mini control strip on linearized, calibrated and profiled device (device does not have to be re-profiled with this maintenance method)
- Measure strip with measurement device
- Check Check conformance with APV/X, if not OK
- Import new TRCA which is automatically generated with APS/X into RIP

**Pros:** Minimum number of steps, «on the fly» calibration to correct for different substrates and for normal device variation

#### Cons: None

«Colors are accurate and print output is automatically stable»