Agfa :Delano with Eizo CG210

SWOP® Soft Proofing Application Data Sheet

1. Manufacturer

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2. Product

:Delano with EIZO® CG210 monitor

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3. Introduction

Agfa :Delano is a project management solution for graphic enterprises. Through web-access, authorized users can manage centralized information for publishing and printing projects. The :Delano StreamProof option leverages the standard built-in soft proof functionality to a higher level by providing fast access to high resolution proofs over internet professional markup tools. The usage of industry standards (like PDF and JDF) and the J2EE-based approach enable smooth integration with the existing production environments as :ApogeeX.

Agfa :ApogeeX is a prepress workflow server for the creation and automation of prepress jobs.

The soft proofing functionality is realized either through PDF soft proofing or the :Delano StreamProof option. :Delano StreamProof makes high-resolution soft proofs available to the remote user in seconds, enabling quick navigation through the color managed images.

4. Control Guide

SWOP® Specifies that a process control guide such as the SWOP Proofing Bar be supplied on every off-press proof in order to ascertain that the proof has been made consistent with the Application Data Sheet. As a minimum, this guide must contain solids of the primary process colors and two-color overprints, as well as a 25%, 50% and 75% tint in 133-line screen ruling of each of the process colors. 25%, 50% and 75% 3-color gray patches must also be included. Additional areas such as 1%, 2%, 3%, 5% and 95%, 97%, 98%, 99% may be particularly useful in digital proofing.

Delano allows verification that soft proofing conditions correspond to the SWOP standards through its 'Soft Proof to Reference Utility' that guides the user through the automated measurement of reference color patches and reporting of deviations of these measurements values to the reference values specified below in the section 'Finished Proof Characteristics'. The below mentioned color profiles and hence reference values are based on the Reference Press Sheets as available in the SWOP Kit 2006 (SWOP Certified Monterey Gloss Sheet Select 2005003 and 2005004).

5. System Components and Setup Conditions

In order to conform to this Application Data Sheet, the following components and instructions must be used:

Server

- Delano 2.6
- ApogeeX 3.0

Remote Client

- Workstation running one of
    i. Microsoft Windows 2000 or higher
       with Internet Explorer 5.5 or higher
    ii. Mac OS X 10.4.5 or higher
       with Safari version 2.03 or higher
- EIZO ColorEdge CG210 monitor with monitor hood
- EIZO ColorNavigator software version 4.1 or higher
- Monitor profiling software, e.g. X-Rite MonacoOPTIX, MonacoPROFILER
- Monitor Lab display and measurement software, e.g. X-Rite MonacoOPTIX, MonacoPROFILER
- Monitor calibration device (supported by EIZO ColorNavigator, Monitor profiling software and Monitor Lab display and measurement software), e.g. GretagMacbeth Eye-One Pro
- In case of viewing soft proof PDF files
    i. Agfa SWOP Profile, downloadable from Delano Server through the Delano 'Soft Proof to Reference Utility'
    ii. Adobe Acrobat version 6 or higher
- In case of viewing soft proofs via Delano StreamProof
    i. Java Runtime (minimum version is specified in the Delano online documentation)

- When comparing soft proofs to hard-copy proofs, use a viewing booth with D50 normalized lighting and adjustable intensity, e.g. GTI SOFV-1ex

Operating Instructions

Following steps need to be followed to ensure that the soft proofs produced by the described system conform to the SWOP requirements.

On the Server side :

1. Ensure that the Delano server is operational and that it can be accessed by a web browser (over LAN or Internet) on the remote client workstation

2. Ensure that the Delano Task responsible for producing the soft proofs, addresses an ApogeeX job configured with the appropriate Agfa SWOP profile (as made available by the Delano Installer)

3. When soft proofs are made available through Delano StreamProof, on the Delano StreamProof server :

    a. Load Agfa SWOP profile

    b. Ensure that the color management settings of Delano StreamProof are set to

        – Use embedded color profiles : Yes

        – Source CMYK rendering intent : Absolute Colorimetric

On the Remote Client side :

1. Power-on the remote client's system components and allow minimum 30 minutes for warming up to a stable condition. Ensure the monitor is connected to the workstation's video card and USB port.

2. Connect the monitor calibrator device to one of the workstation's USB ports and use ColorNavigator to calibrate the monitor :

    a. Start ColorNavigator

    b. Ensure the following Preferences are configured as: 'Set target minutely' is set and 'Reflect the manual adjustment result to the profile" is unset.

    c. Select function 'Calibrate brightness, white point and gamma of the monitor, then generate its profile'

    d. Set target values to the following criteria :

        – Adjust the black level : Minimum

        – White point color temperature : 5000K

        – Gamma : 2.2

    e. Follow the application's instructions to calibrate the monitor.

3. The Delano 'Soft Proof to Reference Utility' provides instructions on how to generate a monitor color profile using the supported Monitor profiling applications.

4. Start the browser and connect to the Delano server. Navigate to the proof to be verified and open it (see Delano documentation).

5. In case of viewing soft proof PDF files

    a. download the Agfa SWOP profile from the Delano 'Soft Proof to Reference Utility' to the operating system's location for ICC profiles

    b. in Acrobat's Color management Preferences, set the CMYK working space to the downloaded color profile, let the Output intent override the working spaces and ensure black point compensation is turned off

    c. switch to preview mode with the downloaded color profile selected and simulating white paper

6. For proper evaluation of the soft proof, maximize the window displaying the soft proof. In case this is a browser window, use the browser's settings and the proper Delano controls to maximize the image viewing area.

In order to verify that the system with the conditions specified in this document :

1. Start Delano 'Soft Proof to Reference Utility' via the web browser.

2. Follow the utility's instructions to measure the color patches and upload the resulting measurement file to Delano

3. Delano generates a table in the browser window comparing the actual measurements for all color patches with the target values provided in this document.

4. In case ΔE_{ab} values greater than 3 are reported, above described monitor calibration and profiling instructions should be repeated.

Viewing and Lighting Conditions

The lighting conditions in a soft proofing environment must be controlled.
Keep the lighting incident at the viewing booth and monitor as low as possible.
Walls must be neutral (gray), illumination with D50 lighting, in a room without direct daylight entry.
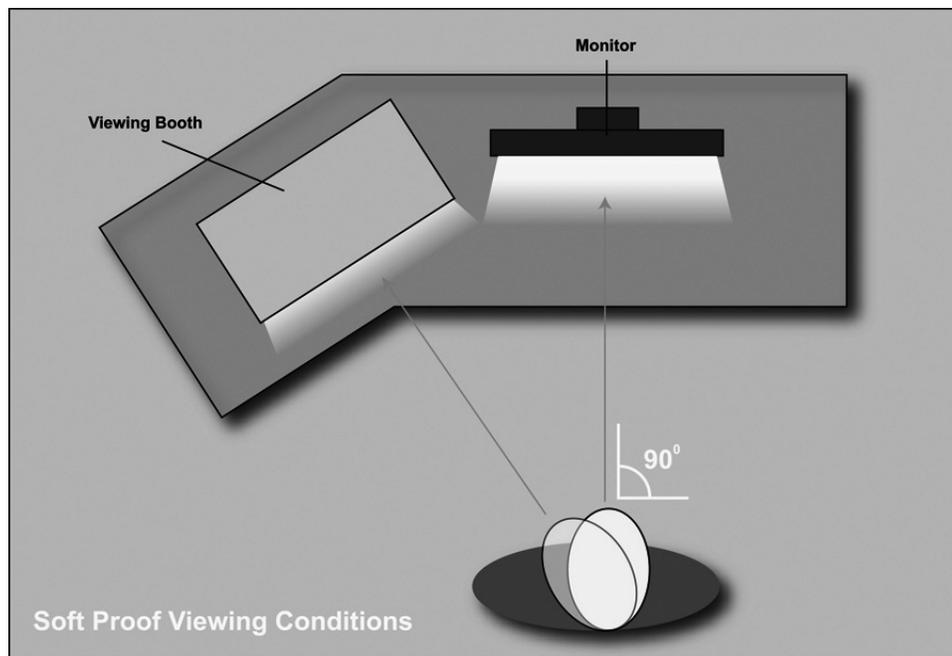
Since most monitors cannot achieve the same luminance as the illumination of a standard viewing booth used in the Graphic Arts industry, a dimmable viewing booth should be used, along with D50 lighting.

Depending on the monitor capabilities and environmental lighting conditions, the luminance of the viewing booth should be adjusted so, that the base of the printed sheet or hard copy proof shows the same luminance as the simulated paper in the soft proof.

To control the evenness of lighting, it is advised to use a viewing booth with multidirectional lighting.

A correct viewing angle is important, especially when using a LCD screen.
It is advised to view directly in front of the monitor, at a 90-degree angle to the screen.

The viewer must be able to judge the soft-proof and press-print or hard-copy proof without changing his angle relative to the screen.

6. Finishing Procedures

Not applicable

7. Finished Proof Characteristics

When properly produced, the following are the characteristics to be expected from softproofs generated by Agfa :Delano :

Color	C	M	Y	K	L*	a*	b*
Cyan	100	0	0	0	58.5	-26.7	-40.0
Cyan	75	0	0	0	65.9	-30.5	-32.8
Cyan	50	0	0	0	74.8	-20.7	-21.6
Cyan	25	0	0	0	84.6	-13.2	-9.4
Magenta	0	100	0	0	46.3	70.9	-5.7
Magenta	0	75	0	0	57.9	49.7	-6.2
Magenta	0	50	0	0	70.0	30.4	-3.6
Magenta	0	25	0	0	81.2	13.3	-1.7
Yellow	0	0	100	0	88.6	-7.8	82.7
Yellow	0	0	75	0	89.0	-8.1	65.3
Yellow	0	0	50	0	90.3	-7.7	44.2
Yellow	0	0	25	0	91.6	-6.1	23.3
Black	0	0	0	100	19.5	0.3	-1.3
Black	0	0	0	75	36.7	-0.7	-2.5
Black	0	0	0	52	55.0	-2.4	-0.6
Black	0	0	0	25	72.8	-3.7	0.1
Red	0	100	100	0	46.3	64.8	36.2
Red	0	75	75	0	55.9	46.8	34.7
Red	0	50	50	0	67.5	28.7	28.4
Red	0	25	25	0	79.8	11.8	16.0
Green	100	0	100	0	52.0	-53.3	24.6
Green	75	0	75	0	60.9	-44.0	22.7
Green	50	0	50	0	71.2	-29.1	18.3
Green	25	0	25	0	82.8	-16.3	11.8
Blue	100	100	0	0	27.1	11.0	-43.5
Blue	75	75	0	0	39.1	12.7	-35.0
Blue	50	50	0	0	54.6	9.1	-23.9
Blue	25	25	0	0	73.2	2.5	-12.7
Gray	75	63	63	0	40.6	-4.7	-2.2
Gray	50	39	39	0	56.7	-3.7	1.7
Gray	25	16	16	0	75.9	-4.4	0.5
Paper	0	0	0	0	93.2	-4.0	2.0

In case ΔE_{ab} values greater than 3 are reported, above described monitor calibration and profiling instructions should be repeated.

8. Sample Proofs

Agfa-Gevaert NV. has demonstrated a :Delano system which conforms to this Application Data Sheet to the SWOP Technical Committee for analysis and verification.

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