



Certified – February, 2004

SWOP® APPLICATION DATA SHEET for

vertis color communicator™ Proofing System

The SWOP® Review Committee has approved the use of off-press proofs as input material to publications.

SWOP® specifications recommend that: “The appearance of an off-press proof used in this application must closely simulate a SWOP® Certified Press Proof.”

I Manufacturer

Vertis, Inc.
250 West Pratt Street
Suite 1800
Baltimore, MD 21201
410-528-9800

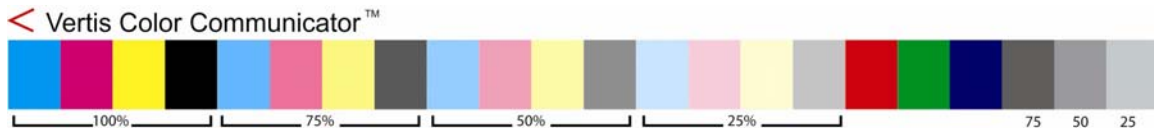
II Product

Vertis Color Communicator™

III Introduction

The Vertis Color Communicator™ is a continuous tone digital inkjet proofing system used for producing color proofs for use in SWOP® applications by using industry standard ICC profiles. The Vertis Color Communicator™ can be color calibrated to match other proofing systems and a broad range of printing conditions. The purpose of this document is to instruct the user in making a color proof in accordance with SWOP® specifications for color proofing applications on the Vertis Color Communicator™.

IV Control Guide



SWOP specifies that a control guide such as a GATF Proofing Bar be supplied on every off-press proof. As a minimum, this guide should contain the primary process colors and two-color overprint, as well as a 25%, 50%, and 75% of each of the process colors. Use and interpretation of such a bar is the responsibility of the user.



V System Components

- Epson Stylus Pro 7600 or Epson Stylus Pro 9600
- Dell 1500 PowerEdge 1600SC (Win 2K Server)
- CGS ORIS Color Tuner software
- GretagMacbeth Eye-One spectrophotometer

VI Consumables

- Epson Premium Semi-matte Photo (250) paper
- Epson 7-color Ultra-Chrome ink with Photo Black

VII Calibration and Color Matching of the Vertis Color Communicator™

Before calibrating the printer, the following procedures should be completed to ensure the setup and stability of the printer:

- Nozzle check: *Epson Stylus Pro 7600/9600 Printer Guide*, 5 - 4
- Head cleaning: *Epson Stylus Pro 7600/9600 Printer Guide*, 5 - 5
- Head alignment: *Epson Stylus Pro 7600/9600 Printer Guide*, 5 - 6

The initial calibration of the Vertis Color Communicator™ (VCC) system will be set-up by Vertis Color Engineering. The procedure for this calibration will use the CGS procedure outlined in the ORIS Color Tuner manual, chapter 6, pp. 105–120. All systems will be calibrated to the Vertis Master Reference printer file. Tolerance for this calibration will be an average $\Delta E < 1.00$. This calibration should be verified on a daily basis and updates to the calibration done according to the VCC user guide.

The SWOP® application proof color profile is created using the ORIS Color Tuner Automatic Color Matching function. This procedure is outlined in the ORIS Color Tuner manual, chapter 7, pp. 121–130. The target profile used is TR001.

VIII Finishing procedures

Allow proof to dry 15 minutes prior to making color evaluations and before taking densitometer and spectrophotometer readings.



IX Finished Proof Characteristics

When proofs are produced on the Vertis Color Communicator™ according to the specifications of this SWOP® Application Data sheet, the following characteristics are to be expected.

| Color | Density (+/-0.05) | TVI Dot Gain 50% (+/- 5%) | Print Contrast At 75% (+/- 5%) | L* | Color (per CGATS.5) C h(ab) (<Δ E CIELab 2.5) | |
|-------|----------------------|---------------------------------|--------------------------------------|-------|---|--------|
| Cyan | 1.30 | 20% | 33% | 54.5 | 54.5 | 227 |
| Mag | 1.40 | 22% | 34% | 46.02 | 66.05 | 358 |
| Yel | 1.01 | 14% | 28% | 83.2 | 85.2 | 93.83 |
| Black | 1.69 | 22% | 43% | 15.46 | 0.29 | 303 |
| Red | NA | NA | NA | 46.11 | 77.71 | 34.95 |
| Green | NA | NA | NA | 49.43 | 64.01 | 157.63 |
| Blue | NA | NA | NA | 25.84 | 42.85 | 293.49 |

Background Density (+/- .02) Dc = 0.11 Dm = 0.13 Dy = 0.18

- CIELAB measurements made with Gretag Spectroscan (45/0 geometry), D50 illuminate, 2 degree standard observer.
- All Densities in status "T". Dot Gain is calculated using the Murray-Davies formula.

X Sample Proof

Vertis, Inc., has supplied two sets of sample proofs prepared using the Vertis Color Communicator™—which conform to this Application Data Sheet—to the SWOP® Technical Committee for their analysis and retention.

Vertis Inc•250 West Pratt Street Baltimore,MD•21201•410-528-9800• Color Technology Group

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