Kodak Polychrome GRAPHICS

Proofing Systems

SWOP® Off-Press Proof Application Data Sheet

Matchtprint Digital Halftone 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." See other explanations and recommendations as outlined on pages 21 and 47 of the 2001 Ninth edition of the SWOP specifications for Web Offset Publications.

The following information is intended to assist producers and consumers in the use of proofing materials in a SWOP proofing application. This Application Data Sheet was previously titled, *Creo Trendsetter Spectrum or Proofsetter Spectrum for Matchprint Digital Halftone Proofing System*. For information on how to make a Matchprint Digital Halftone proof or degloss the finished proof, refer to the Product Information Sheets available at www.kpgrpahics.com/matchprintpi

SPECIFICATIONS for WEB OFFSET PUBLICATIONS
SWOP CERTIFIED SYSTEM
Certified - April 2005

I. Manufacturer

Kodak Polychrome Graphics
401 Merritt 7, 3rd Floor
Norwalk, CT 06851

II. Product

Kodak Polychrome Graphics Matchprint Digital Halftone Proof for Creo Trendsetter Spectrum or Proofsetter Spectrum.

III. Introduction

The history of Matchprint proofing products designed to meet the needs of the printing industry began in the 1960's when proofing films were introduced. Throughout this time, we have viewed color reproduction as a process rather than a series of independent events. We base this on the premise that an advertiser's major commitment to expense and image is determined at the print production site. For this reason, a Matchprint Digital Halftone Proof, when made to the following guidelines, is intended to simulate the characteristics of a production press operating within the SWOP guidelines for production printing.

Quality System

Matchprint Digital Halftone Proofing materials outlined in this Application Data Sheet are made in the U.S.A. and produced in our facility, which has been registered by Underwriter Laboratories, Inc. to the ISO 9002 quality standard.

IV. Control Guide

SWOP specifies that a control guide such as a GATF/SWOP Proofing Bar be supplied on every off-press proof. As a minimum, this guide should contain solids for 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. A control guide containing these imaging characteristics must be present on every proof. All control guides should be checked for accuracy of the original values. Use and interpretation of a control guide is the responsibility of the user.

V. System Components

For a Matchprint Digital Halftone Proof to be considered a "SWOP" proof, the following components must be used:

- Matchprint Digital Halftone Standard Proof Film: yellow, magenta, cyan GT, and black GT
- Matchprint Digital Halftone Release Receptor GT
- Matchprint Digital Halftone Prep Sheet GT
- Monterey Gloss 60#
- Matchprint Digital Halftone Semi-Matte Degloss Sheet
- Matchprint Model 447L or an Approval 800XL laminator
- Creo Trendsetter Spectrum or Proofsetter Spectrum

Target Input Values

Dot %	Cyan	Magenta	Yellow	Black
0	**0**	**0**	**0**	**0**
2	4.2	4.5	4.1	4.7
4	8.4	8.9	8.1	9.4
6	12.5	13.2	11.9	13.8
8	16.3	17.3	15.6	18.0
10	20.0	21.1	19.0	21.7
15	28.6	29.9	26.7	30.2
20	36.7	38.1	33.8	37.7
25	43.8	45.1	40.3	44.4
30	50.0	51.1	46.5	50.7
35	55.9	56.7	52.9	56.7
40	61.5	61.9	58.5	62.3
45	66.7	66.7	64.0	67.6
50	71.5	71.1	69.3	72.3
55	76.0	75.3	74.3	76.3
60	80.2	79.1	79.0	79.7
65	84.0	82.5	83.5	82.8
70	87.5	85.7	87.5	85.6
75	90.5	88.7	90.9	88.3
80	93.1	91.4	93.6	90.9
85	95.2	93.8	95.7	93.4
90	97.0	96.0	97.4	95.7
95	98.6	98.0	98.8	97.9
100	**100**	**100**	**100**	**100**

Output Parameters:

Line screen ruling: 133 lpi
Proofing sequence: KCMY
Screen Angles: Y=0, M=75, C=15, K=45

VI. Finishing Procedures

A degloss finishing step is necessary so that the final proof visually simulates the looks of a SWOP press sheet. For information on how to degloss the finished proof, refer to the Product Information Sheets available at www.kpgraphics.com/matchprintpi.

VII. Finished Proof Characteristics

A properly made proof should have the following color characteristics:

Color	Density Absolute	TVI @ 50% (Dot Gain) (± 2)	Print Contrast @ 75% Tone (± 5)	Color (per CGATS.5)* L*	a*	b*	C*	h(ab)*	Maximum ΔE^*_{ab}
Yellow	0.88 (± 0.04)	20	16	84.7	-6.5	77.1	77.2	94.3	4
Magenta	1.44 (± 0.05)	21	36	47.7	70.2	-3.2	70.8	357.2	3
Cyan	1.33 (± 0.05)	22	28	55.2	-38.0	-38.4	54.1	224.8	3
Black	1.81 (± 0.07)	21	44	12.8	3.2	2.0	4.4	328.0	4

Background Density (+/-0.02): D_c = 0.14 D_m = 0.14 D_y = 0.16

*CIELabCh values represent measurements at target density.

The following data is for reference only in addition to the conformance information shown above:

Area	CIELab Values L*	a*	b*	C*	h(ab)*
Background/ Substrate	87.8	-0.8	2.7	n/a	n/a
Black 25%	70.6	-0.5	1.1	n/a	n/a
3-Color Gray 25%	71.3	-2.2	0.2	n/a	n/a
Black 50%	53.8	0.0	0.0	n/a	n/a
3-Color Gray 50%	54.7	-1.3	-0.1	n/a	n/a
Black 75%	38.5	0.6	-0.8	n/a	n/a
3-Color Gray 75%	39.3	-1.2	-0.1	n/a	n/a
Red (overprint)	46.4	63.5	43.2	76.6	34.4
Green (overprint)	51.1	-64.5	25.5	69.3	158.3
Blue (overprint)	22.3	31.6	-42.8	53.2	306.5

Three-color grays made up of Cyan, Magenta, Yellow: 75, 63, 63; 50, 39, 39: and 25, 16, and 16 values.

Note: All measurements were made using a calibrated Gretag SPM50 spectrophotometer (D50 illuminant, 2° observer, non-polarized). The density (Status T) and colorimetric values are absolute, base included, measured over a black backup. TVI's were calculated using the Murray-Davies equation (CGATS.4). All tolerances reflect normal systems variability and assume the use of a calibrated measurement device.

VIII. Sample Proofs

Kodak Polychrome Graphics has supplied two proofs that conform to this Application Data Sheet to SWOP for its analysis and retention.

CALL TOLL-FREE 1-877-KPGraphics (1-877-574-7274), FOR ADDITIONAL INFORMATION
OR VISIT US ON THE WEB AT www.kpgraphics.com

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