Agfa :Grand Sherpa 7-color Proofing System

SWOP® Application Data Sheet

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 must closely simulate a SWOP press proof”.

1. Manufacturer:

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2. Product:

Agfa :Grand Sherpa™50m and 64m 7-color proofing system

3. Introduction:

The Agfa :Grand Sherpa 50m and 64m family of piezo-electric inkjet digital proofing systems produce color proofs for use in SWOP® applications by using ICC profiles created with ColorTune Pro color management software. Agfa :Grand Sherpa Digital Proofing system utilizes QmsX software and a spectrophotometer for engine calibration and Proofer-Check consistency. The Agfa :Grand Sherpa Digital Proofing system can be color calibrated to match other proofing systems, and a broad range of printing conditions. In addition to matching the CMYK color space of the target condition, Agfa Grand Sherpa Digital Proofing System uses PANTONE® and user defined libraries for spot color rendering.

4. Control Guide:

SWOP® specifies that a control guide such as a SWOP Proofing Bar be supplied on every off-press proof. As a minimum, this guide should contain solids of the primary process colors and two-color overprints, as well as 25%, 50% and 75% tint in 133-line screen ruling of each of the process colors. Any color bar should be checked for accuracy of the original values. This can be performed by using the Proof to Reference check through QmsX and/or :Sherpa CMS.

Agfa recommends that the following control guide(s) be used in producing :Sherpa Digital Color Proofs. Control Guide – SWOP Digital Proofing Color Bar and/or the Digital Proof Comparator when producing :Sherpa proofs. The use and interpretation of the control bars is the responsibility of the user.

5. System components & Procedure

The following components and limited processing procedures shall be used with the Agfa :Sherpa Digital Color Proofing System in order to achieve conformance with this Application Data Sheet:

- Agfa :Grand Sherpa 50m/64m 7-color Digital Proofing Engine
- Agfa :ApogeeX Proofer or any :ApogeeX configuration with integrated Proofing option v2.5 or later
- Agfa :QmsX v 2.5 or later
- Agfa :Sherpa CMS v 1.2 or later
- Agfa :ColorTune Pro v 4.2 update 1 or later
- X-Rite DTP41, DTP45, 530 or GretagMacbeth SpectroLino/SpectroScan
- :AgfaJet Digital proofing Base 165 g/m^2 satin (ADPB165)
- Agfa AM 7-color dye inks

Procedure for making proofs for use in SWOP™ applications the Agfa :Grand Sherpa 7-color Proofing System":

- Load the appropriate :AgfaJet Digital Proofing base on the :Grand Sherpa 50m/64m
- Use :Grand Sherpa AM dye ink
- Calibrate the Agfa :Grand Sherpa Digital Proofing Engine with :QmsX as outlined in the QmsX user documentation.
- Perform a "proofer check" calibration check as outlined in the :QmsX user documentation.
- If calibration is good :QmsX will indicate that a "confidence score" of higher when 97.5% is reached.
- In :ApogeeX generate a Jobticket in which the following ICC profiles are enabled for the proofing flow: (for detailed procedure follow outlines in :ApogeeX Help)
  - for the press-profile: SWOP-textweb-AgfaCT-VB.icm
  - for the Proofer-profile: GS7da-1440-8-splnof_vb_def.icm

6. Finishing Procedure

The following finishing instructions are necessary in order that the Agfa :GrandSherpa™ Digital Proofing System conforms to this Application sheet. Allow proofs to dry for approximately 30 minutes prior to making critical color judgments.

7. Finished Proof Characteristics

When properly processed and/or produced, the following are the characteristics to be expected from Agfa Grand Sherpa™ Digital Proofs. All of the below readings were made with a properly calibrated X-Rite® 530 spectrophotometer. Density readings were made absolute. As with any brand of spectrophotometer – small variations in readings are to be expected from model to model and site to site, proper instrument calibration helps to minimize the differences.

Substrate/background Densities (paper color simulated): Status T spectral products used (absolute)

Cyan (red Filter):	0.12	L*=	89.7
Magenta (green filter):	0.14	a* =	1.5
Yellow (blue filter):	0.18	b*=	5.5
Black (visual filter):	0.13	C*=	5.7
		h(ab)*=	75

	Density 50%	**TVI at 50%**	**Print Contrast At 75%**	**Color (per CGATS .5)**					
				L*	**a***	**b***	**C***	**h(ab)***	**ΔE_{94}**
Tolerance	± 0.05	± 3.0	±5.0						-
Yellow	0.92	14	27	85.6	-3.7	82.3	82.4	92.5	4
Magenta	1.55	19	39	47.7	74.5	0.94	74.2	359.9	4
Cyan	1.29	19	33	55.7	-38.0	-41.1	55.9	227.2	4
Black	1.41	21	34	21.2	1.6	1.4	2.6	41.6	4
Red				45.7	66.3	45.2	83.7	33.0	4
Green				49.4	-60.7	26.1	69.6	158.8	4
Blue				24.2	17.4	-40.1	46.2	292.5	4

Tolerance ± 0.05	Cyan	Magenta	Yellow	**L***	**a***	**b***	**C***	**h(ab)***	**ΔE_{94}**
3 Color Gray 25 %	0.35	0.35	0.35	72.3	0.5	1.5	1.5	66.1	4
3 Color Gray 50 %	0.65	0.66	0.64	52.8	0.4	1.9	2.0	79.4	4
3 Color Gray 75 %	0.95	0.98	0.92	40.0	-1.2	1.3	1.8	133.8	4

Density is the major filter value and TVI is computed using the Murray-Davies equation.

8. Sample Proof

Agfa-Gevaert NV. Has supplied two sets of Agfa :GrandSherpa™ Digital Proofs which conform to this Application Data sheet to SWOP® for analysis and retention.