



**SWOP Frequently Asked Questions**  
 March 2005

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## **About SWOP**

### ***How can I become a member of SWOP, Inc?***

SWOP, Inc. presently does not have individual membership in the typical sense of the word. It is a not for profit corporation, with a Board of Directors and an Industry Review Committee that are essentially a group of unpaid volunteers from all segments of the graphic arts industry devoted to improving the quality of publication printing by setting forth specifications and providing guidance. New in 2005 a network membership will be available through IDEAlliance. Contact [info@swop.org](mailto:info@swop.org) for more information.

### ***How can I get involved with SWOP?***

SWOP, Inc. consists of a number of endorsing organizations from all quarters of the publication industry. Various corporate sponsors and standards bodies also participate in SWOP, Inc. Ideally one can get involved through one of those groups. For example, if you are in prepress you can get involved through the IPA. If you are a printer, you can get involved through IDEAlliance. If you have no connection to any of these organizations, and you feel that you can contribute, contact SWOP, Inc. ([info@swop.org](mailto:info@swop.org)) directly about the possibility of participating via other means.

### ***How does SWOP, Inc. operate?***

SWOP is incorporated and has a board of directors, composed of representatives from its endorsing organizations and other individuals active in publication industry. This group meets several times a year to discuss developments in the industry and to chart the course of SWOP activities. SWOP, Inc. also has a review committee composed of interested volunteers from across the graphic arts arena who provide the board with input and who help guide the evolution of SWOP specifications.

### ***What is the Relationship between SWOP and IDEAlliance?***

In July 2004 SWOP formed an affiliation with IDEAlliance to address the coordinated development of specifications and guidelines, certification programs, software tools, educational seminars, and peer support networks. This partnership represents the commitment of each of these organizations to continually raise the level of quality of publication printing through the development of industry standards to provide interoperable technology solutions to common business problems. See [www.idealliance.org](http://www.idealliance.org) for more details.

## **SWOP Specifications**

### ***Where can I access the SWOP Specification?***

The SWOP 10 Specification is now available at [www.swop.org/](http://www.swop.org/). The 10<sup>th</sup> edition of the SWOP Booklet is now available at PrintTools.org ([www.printtools.org](http://www.printtools.org)).

### ***What are the recommendations for minimum type size when reversed or knocked out of a printed background?***

To help ensure legibility, type that is reversed out of a background should not be less than .007", typically corresponding to 1/2 point. Fine serifs should also be avoided. Surprint—i.e. type printed on top of a halftone tint—should not be less than .004". Stand-alone type, where there are no halftone dots of the same color around the type, may be any size but should be one color when very small. See pages 14 and 31 of the ninth edition SWOP booklet, "SWOP for the New Millennium" for further information.

### ***What numerical densities does SWOP specify for press proofing? For off-press proofing?***

For press proofing SWOP does not specify numerical densities but rather refers to the SWOP<sup>®</sup> Hi-Lo References, obtainable from PrintTools.org ([www.printtools.org](http://www.printtools.org)), from which proper print densities can be derived using your particular densitometer. For highly accurate densitometers based on spectrophotometry,

the target densities for SWOP<sup>®</sup> printing have been ascertained from historical averages of the Hi-Lo references and are very close to the following: Cyan 1.30, Magenta 1.40, Yellow 1.00 and Black 1.60. For off-press proofing systems using specialized colorants, SWOP has no way of knowing the optimum densities for making a SWOP proof. That's why SWOP, Inc. developed the certification program, a main requirement of which is an Application Data Sheet, to be supplied by each manufacturer, indicating the proper values (density or colorimetry) of the solid colorants for a properly made SWOP<sup>®</sup> proof.

***If printers are not printing with the dot gains that SWOP, Inc. specifies should we change the specification or should printers need to adjust the way they are printing?***

Over the years, SWOP has specified target dot gains (now termed Tone Value Increase, TVI) that appear to be representative of the mid-point in the industry and that have been deemed attainable by a wide range of offset printing equipment and materials. SWOP understands that not every operation may be perfectly tuned to its TVI specifications. However asking all parties in the publication industry to strive for these targets will produce the best chance for uniform quality. Also, with today's new CTP technology there are adjustments in platemaking that can assist printers to achieve the target TVI's in their overall process.

***What are SWOP specifications for yellow print contrast?***

The eighth edition of the SWOP booklet—where print contrast was referenced but not officially a part of the specifications—had a recommended yellow print contrast range of 25-35%. The new ninth edition—where print contrast is now a part of the specifications—lists the yellow print contrast specification as 25% +/- 5%, corresponding to a range of 20-30%.

***What does SWOP, Inc. have to say about total area coverage above or below the specified 300%?***

SWOP suggests that a small, non-critical image area may contain total tone value up to 325%. The only recommendation concerning total tone value below 300% concerns the need to have sufficient three-color tone value under black when GCR is used in order to maintain sufficient gloss and density. This is particularly applicable in Gravure printing. See page 35 of the SWOP Booklet for information and a chart illustrating recommended values.

***Does SWOP, Inc. have a set of non-heatset specifications?***

SWOP specifies proofing for the publication market on #5 coated groundwood or equivalent and has guidelines for printing on heatset web offset presses. SNAP, Specifications for Non-heatset Advertising Printing (see SNAP at [www.gain.org](http://www.gain.org)), deals with printing on uncoated stock and coldset presses. GRACoL ([www.gracol.org](http://www.gracol.org)) is a set of guidelines that covers a wide range of printing from coldset to heatset and a wide range of stocks.

***Why doesn't SWOP, Inc. specify ink trap? How do I determine if two color overprints are correct?***

We do not discuss trap in SWOP simply because it is not a characteristic that can be reliably specified. It will change with actual physical trap (what some think they are measuring, but are not), with density, with ink film thickness (not necessarily the same thing), with ink transparency and probably several other variables. Two color overprints can better be measured colorimetrically. CIE Lab guidelines for CM, CY and MY overprints can be found in CGATS.6 (1995) Graphic technology-Specifications for graphic arts printing-Type 1, available from NPES, ([www.npes.org/standards/workroom.html](http://www.npes.org/standards/workroom.html)).

***Does SWOP, Inc. provide any guidance for black-and-white photos printed as four color separations?***

SWOP does not provide any guidance other than the relevant portion of the specifications dealing with gray balance, total ink area coverage, tone value increase, and UCR/GCR. The information on Pages 33 and 34 of the SWOP Booklet, concerning Gray Balance, is particularly relevant.

***CTP has caused the commercial arena to face some of the same difficulties as pub work, yet none of the other commercial standards seem to be as well established as SWOP. To what extent can SWOP<sup>®</sup> proofing standards be applied to commercial (web or sheetfed) work?***

If you take a look at the GRACoL guidelines, you'll see that printing is basically all the same. However, as you change input materials (like paper, etc.), things will change with it. Going to a brighter, higher gloss stock will allow the use of inks that produce less dot gain (TVI). It will also produce cleaner colors. Since you have less TVI, you can usually run higher densities and thus get somewhat more saturation. Going to an uncoated paper will create the opposite results and will usually produce more TVI. Thus you normally run with lower line screen rulings to accommodate this. The SWOP specifications are still a good basis for most printing because printing is printing. Only if you change the input materials (paper, ink, lpi, etc.) will you change the process. The major key is to measure your process and use good process control procedures. The GRACoL guidelines spell this out pretty well.

## ***Color Management, Profiles and TR001***

### ***What the heck is TR001?***

TR001 refers to an ANSI technical report whose full title is "CGATS TR001-1995 Graphic Technology-Color Characterization Data for Type 1 Printing."

Available from NPES ([www.npes.org/standards/workroom.html](http://www.npes.org/standards/workroom.html)) this report documents the development of a color characterization data set, based on measurements from the IT8/7.3 target, from press tests run to SWOP reference print conditions that are documented in "CGATS.6-1995 Graphic Technology – Specifications for graphic arts printing – Type 1," also available from NPES.

### ***How is TR001 related to SWOP Certification?***

All SWOP Certified Press Proofs are verified to have been printed to SWOP<sup>®</sup> reference print conditions as specified by SWOP and documented in CGATS.6. Therefore, the characterization data one might measure in the IT8/7.3 target on a SWOP Certified Press Proof should be very close to that documented in TR001. Thus a proofing system that accurately simulates the TR001 characterization should correspondingly simulate a reasonable match to the SWOP Certified Press proof.

### ***How can one use the printed IT8 target from a SWOP Certified Press Proof to help improve the match between my proofer and the Certified Press Proof?***

The IT8 target can be measured to create a characterization data set that can be used to make an ICC profile. This profile could be used as source profile in a color-managed CMYK proofing system to improve the match of a proofer to the Certified Press Proof. Alternatively, one could simply use the TR001 characterization data set which should be quite representative of that measured from a Certified Press Proof.

### ***There are a lot of ICC profiles that are labeled as SWOP. How do I know which are valid?***

SWOP, Inc. specifies the use of TR001 for color-managed applications. Thus, the only ICC profiles which can correctly claim to be made in conformance to SWOP specifications are those that have been made from the TR001 characterization data set.

### ***Shouldn't all ICC profiles made from TR001 ideally perform the same?***

No, not always. When used as source profiles (e.g. the CMYK-to-Lab tables in the profile) in color-managed CMYK proofing systems, all TR001-based profiles should ideally behave the same, subject to small software interpolation differences. However, when performing RGB to CMYK conversions (e.g. using the Lab-to-CMYK tables in the profile), TR001-based profiles may give widely differing results due to the diversity in gamut mapping algorithms used by various profiling packages.

***Is there a widely available ICC profile that is based on TR001?***

A commonly available profile based on TR001 is the USWebCoated (SWOP) profile supplied with Adobe Photoshop 6 and 7. You may download this profile free-of-charge from the Adobe website ([www.adobe.com/support/downloads/main.html](http://www.adobe.com/support/downloads/main.html)). SWOP, Inc. does not endorse this profile over any other TR001 profile that may be made available by color management vendors.

***We have recently started to color manage our process with ICC profile. I am struggling with dot gain, and am not sure how to check myself. On press I want the black to gain 22%, is that 22% of 50% = 61% or is it 22% + 50% = 72%?***

Total Dot Gain, (now known as Tone Value Increase or TVI) is AN ADD ON PERCENTAGE. That is: Dot Gain = Dot Area in the printed sheet minus the Dot Area in the original film or file. So in your way of saying it, a 50% dot in the original file will measure as a 72% dot on the paper. Today that equation translates to: TVI = TV in printed sheet - TV in the original file, where TVI = Tone Value Increase (aka Dot Gain)

$$TV = \text{Tone Value (aka Dot Area)}$$

The equation for figuring Tone Value is as follows according to the Murray-Davies Equation  $TV = 100 * (1 - \log(\text{Den } 50\% - \text{Den Paper})) / (1 - \log(\text{Den } 100\% - \text{Den Paper}))$ , where: Den = Density log is the logarithm to the base 10 50% and 100% are the tones as stated in the original file or film.

These equations are included in the SWOP Specifications Booklet which can be purchased from our web site. IN addition, I might recommend that you call or get ahold of NPES and buy the two National Standards: CGATS.4 and CGATS.5. They are the standards defining how to use both a densitometer and a colorimeter: or better yet, a spectrophotometer that gives you both data sets. They are also referenced in the SWOP Specifications booklet. Call NPES at 703-264-7200 or contact them on their web site at [www.npes.org](http://www.npes.org).

***When preparing PDF/X-1a files should we have our advertisers use a generic TR001 ICC profile or a custom profile made from actual characterization data from our presses?***

SWOP specifies the use of TR001 for color-managed applications. This is so advertisers everywhere will target the exact same press characterization. This is the best way to ensure uniformity when an ad is likely to be printed in a wide array of publications and on a number of different presses. However, in a closed situation where certain material is only going to be printed on one press, one might get somewhat better results if actual press characterization data is used to make the profile. This of course depends heavily on whether the press data is truly indicative of that press' general performance, (i.e. was it derived from a good press test).

***How was TR001 obtained? What kind of press? Paper?***

TR001 was derived from a carefully prepared and imaged test form, using SWOP/NAPIM conforming inks, printed on a sheetfed press on Textweb proofing stock. Most importantly SWOP aims for density, tone value increase (TVI) and gray balance targeted to very close tolerances on press. Sheets that achieved these aims most closely were selected and measured in several labs with different spectrophotometers. The measurements were verified to have very close inter-instrument agreement and were averaged across the chosen sheets to produce the data documented in TR001.

***The Pantone Coated SWOP Process Color Guide does not appear to be printed in conformance with SWOP Specifications and often creates an impossible target to match for publication production printing. Why is this?***

The Pantone SWOP Process Color Guides do not conform to SWOP specifications. Over the years the name SWOP has been improperly used in the way some vendors described their products. In the case of Pantone, the use of the word "SWOP" simply indicated that SWOP compliant inks (now defined by ISO 2846-1) were used to print the product. However, for a product to be correctly labeled "SWOP<sup>®</sup>" it must conform to the many other specifications that SWOP, Inc. puts forth, such as paper, tone value increase, etc. SWOP, Inc. is working to ensure that all vendors, including Pantone, give proper attribution to

SWOP's trademarks and that their products accurately reflect their relationship, or lack thereof, to SWOP specifications.

***How do I translate Pantone colors to equivalents in SWOP?***

Probably the most reliable way at present would be to take Lab measurements of the Pantone color and use a color-management application to derive CMYK values from an ICC profile based on TR001.

**Measurement**

***How do I determine which densitometers are most accurate?***

All densitometers have inaccuracies due to the somewhat imperfect characteristics and variations of the red, green, and blue filters used in the cyan, magenta and yellow channels. For this reason all conventional filter-based densitometers tend to have significant inter-instrument variation, especially models from different vendors. However, density values can also be calculated mathematically from a full spectrum measured by a spectrophotometer. These readings are consistent and highly accurate, and can be used to evaluate accuracy of conventional densitometers. The significant decline in price of spectrophotometer instrumentation will enable more accurate density readings for process control in the graphic arts.

***What is the best way to correlate readings between various conventional densitometers?***

Obtain a standard physical reference, such as the T-Ref from Idealliance ([www.gain.net](http://www.gain.net)) which can be measured with each densitometer to create a table of offsets. However, it is important that each densitometer is first calibrated to its own calibration plaque so that these offsets will be valid over time.

***What is the difference between Status T and Status E density? Which is better?***

Status T (popular in the U.S.) and Status E (popular in Europe) differ only in the bandpass for the blue filter on which the yellow density readings depend. The Status T densitometer has a slightly broader blue filter bandpass and generally yields significantly lower numerical readings for most yellow inks than does a Status E densitometer. Cyan and magenta densities ideally will read the same for Status T and Status E densitometers. If used properly either type of densitometer will give comparable process control performance.

***The color bar targets specified on the ADS of my (SWOP certified) proofing system specify solid densities much different from the ink densities in my SWOP Hi-Lo reference. How can this be?***

Since the reflectance spectra of proofing colorants may differ significantly from printing inks, there can be significantly differing densities even for visually matching solids. Furthermore, in developing the best overall match to SWOP, a proofing vendor may have to make compromises that may require additional deviations in densitometric aim points compared to the Hi-Lo references. This is why it is becoming increasingly popular to compare color using spectrophotometric measurements. These measurements correlate visual appearance much more consistently than density measurements and can provide less equivocal process control and less instrument dependency in matching target values on Application Data Sheets.

***How can I get the SWOP Hi-Lo References?***

The SWOP Hi-Lo references are not made directly available by the SWOP Board. Instead, a subscription to printed ink references that illustrate accepted "standard" color and density values at the upper and lower acceptable limits for ink-on-paper proofing using SWOP specified proofing inks and proofing paper can be purchased at [www.printtools.org](http://www.printtools.org).

## **File Formats**

### ***In a PDF/X-1a file how is the OutputIntents array used to indicate that the CMYK data has been prepared for SWOP® printing?***

There are two ways. Either: a) the OutputConditionIdentifier key has the value “CGATS TR001” or b) the DestOutputProfile key indicates the presence of an ICC profile that was created using the CGATS TR001 characterization data.

## **Inks**

### ***What file formats are used for data on the SWOP Calibration Kit?***

The SWOP Digital Calibration Kit is supplied as print-ready material using TIFF/IT-P1 and PDF/X-1 file formats, the same formats that are specified by SWOP for exchange.

### ***What is the preferred ink rotation for heatset web offset?***

SWOP, Inc. recommends the KCMY rotation for proofing, which is the sequence used for SWOP certified proofs. SWOP does not have a recommended sequence for web offset printing where a variety of operational and color reproduction requirements must be considered. However, KCMY appears to be the most prevalent sequence used by major printers.

### ***What CMYK values does SWOP, Inc. recommend for a rich black?***

While SWOP does not specify tones for rich black, 40C 30M 30Y 100K will likely work well.

### ***How does one determine if an ink set complies with SWOP specifications?***

For many years SWOP, Inc. has provided, through the IPA, printed Hi-Lo Color References, which can be used to identify the hue and density of inks that comply with SWOP specifications. More recently, SWOP has agreed that international standard ISO 2846-1 is acceptable as a specification for ink to be used in publications in this country. Ink sets can also be sent to the laboratories of GATF or Sun Chemical Corporation for evaluation and analysis. There will be a charge for this service. See the SWOP booklet for addresses.

### ***Where can I obtain information about inks that satisfy SWOP specifications?***

Information regarding SWOP® Inks may be obtained from National Association of Printing Ink Manufacturers (NAPIM) [www.napim.org](http://www.napim.org).

### ***Does SWOP support the use of new technology inks such as vegetable oil based inks?***

SWOP, Inc. specifies inks based on their conformance to colorimetric characteristics, not on the basis of raw materials.

## **Screening**

### ***What does SWOP say about deviating from the specified 133 line per inch ruling or the specified screen angle relationships?***

SWOP, Inc. feels that the present specifications provide the most reliable way to guarantee uniform quality across a broad industry that utilizes a wide range of equipment and technology. SWOP does not forbid the use of alternate line rulings and screening but specifies that there must be **prior agreement of all parties involved**. This highlights the challenge of maintaining quality in diverse, inter-enterprise industry.

### ***What is SWOP's position on stochastic screening?***

SWOP, Inc. does not forbid the use of stochastic screening but states that alternative screening methods must be pre-approved by all parties involved. Regardless of screening methodology it remains the responsibility of the printer to match the SWOP® proof.

***Is there a way to mix stochastic/conventional screening in a form?***

Generally, stochastic and conventional screening will have different tone reproduction characteristics. Mixed screening in a form will likely require different tone compensation for the various components on a form. In theory, this may be possible on modern CTP imaging systems. Whether the equipment vendor or the printer provides this functionality and whether it is consistent with production reliability is another issue.

**Paper*****What paper is used for printing SWOP Certified Press Proofs?***

After a full review of paper characteristics and a July 2004 successful press run of center point SWOP Certified Press Proofs, Monterey Gloss has been deemed acceptable as a SWOP approved proofing stock. Proofs produced on Textweb proofing stock are still acceptable, as well, but please note that this paper is not longer manufactured and is in short supply.

***Where can I purchase Monterey Gloss paper for my SWOP Proofs?***

Monterey Gloss can be purchased by contacting Yvonne Blessing, Manchester Industries, Telephone: 804.226.6105, email: [yblessing@manchester-industries.com](mailto:yblessing@manchester-industries.com).

***Is SWOP useful for situations that lie outside the specifications such as for different stock?***

The basic principles of the SWOP specifications have been found to be useful for a wide range of applications and papers, such as for printing on coated or Supercalendared papers, on sheetfed or web presses. However, one should be careful to distinguish the differences and not to use the word SWOP to describe these applications.

***How do I know if the brightness of the stock I am using for proofing satisfies SWOP? Why doesn't SWOP have a specification for stocks brighter than #5 groundwood?***

Stocks that are much brighter than typical #5 publication stocks (brightness around 72) would generally be unacceptable from SWOP's point of view. Of course, if actual production stock in a given situation is much brighter than 72, then there could be a rationale for using brighter stocks for proofing. However, we would not consider this a typical SWOP application. SWOP specifications are intended to help minimize unpleasant surprises for advertising that is supplied from many sources when it may not be possible to predict the ultimate production stock.

***Which paper stocks are certified by SWOP? How do I find a suitable paper for SWOP applications?***

SWOP, Inc. does not "certify" paper stocks but simply defines the characteristics of an acceptable stock in terms of brightness and color (see page 42 in the ninth edition of the SWOP booklet). Until 2004 we have simply suggested that "Textweb Proofing Paper" met those criteria. Beginning in 2005, Monterey Gloss has been identified as a "SWOP Certified Proofing Paper."

***Do you have a list of papers available that would be acceptable to use for certification? Also, is there a tolerance allowed in the brightness of paper? For instance would 77 be acceptable?***

No, we do not have a list of acceptable papers. We define the paper using Brightness, CIELab and density numbers as a guideline. This means that we do not have a tolerance for paper or substrates. The real test of tolerance in this regard is the results of the subjective evaluation of the match to the certified press proof. However, if the substrate is too bright, that will probably mean that it cannot be matched on press using a #5 groundwood sheet. Thus, it would probably not be certifiable. A little brighter is usually okay, but it would seem that 77 brightness (which is almost equivalent to a #3 sheet) is excessive. Brighteners in the substrates also can make a difference in the ability to match a certified press proof.

***My customers like to see proofs on Fortune Gloss. Can these proofs still be called SWOP proofs if we are using a SWOP Certified system and follow ADS for that system with the exception of the paper?***

No one can claim that they are complying with SWOP if they are making proofs on Fortune Gloss (unless they are simulating the color of either Textweb or Monterey Gloss). Compliance to the entire content in any given ADS, including the substrate to be used, is required in order to state that proofs are in compliance with SWOP.

## **Press Production Guidelines**

***Does SWOP deal with production tolerances of other non-print parameters such as fold and trim?***

The scope of SWOP covers the appearance of print quality and of necessity does not deal with many other issues that are related to overall magazine manufacturing and product quality. Many of the issues such as fold and trim are specific to particular equipment and are customer-driven.

***Doesn't SWOP apply for both web and sheetfed print production?***

SWOP specifications deal with procedures, materials, parameters and responsibilities in the **preparation** of information and materials that are intended for publication printing. It does not provide detailed specifications for production printing but specifies that it is the responsibility of the printer to match the supplied SWOP<sup>®</sup> proof. SWOP does provide a section of the SWOP booklet on Guidelines for Web Production Printing that should be helpful to publication printers to fulfill this responsibility. The same principles can be applied, in great part, to sheetfed print production. Sheetfed production specifications and guidelines can be found on the IDEAlliance GRACoL website at [www.gracol.org](http://www.gracol.org).

***Does SWOP provide Heatset Web Offset production tolerances for other pressroom factors such as fold, trim and crossover alignment?***

SWOP, Inc. only provides **specifications** for materials that are input to the print manufacturing process. It does provide certain **guidelines** for web offset print production targeted toward the color and print quality. Many of the other details of web print production are beyond the scope of SWOP.

## **SWOP Certification**

***What is the SWOP Certification Program?***

SWOP has introduced a certification procedure and accompanying Certification Mark for off-press proofing systems. Manufacturers of off-press proofing systems must submit a SWOP Application Data Sheet (ADS) and representative proofs to SWOP to achieve SWOP Certification. SWOP representatives check proofing systems submitted for certification against the supplied Application Data Sheet for quantitative conformance and determines the acceptance of each system's visual match to a SWOP Certified Press Proof. An ADS must provide directions for producing proofs as closely as possible to the appearance of the SWOP Certified Press Proof. Application Data Sheets for each analog and digital off-press proofing system are available through SWOP Inc.

***How can I get my system certified?***

To certify a system, just go to [www.swop.org/certification.html](http://www.swop.org/certification.html). The first step is to download the certification application. Next you will select a certification date and provide an Application Data Sheet and press sheets printed on Monterey Gloss to the SWOP certification authority.

***Where can I purchase Monterey Gloss paper to print press sheets to submit for SWOP Certification?***

Large quantities of Monterey Gloss can be purchased by contacting Yvonne Blessing, Manchester Industries, Telephone: 804.226.6105, email: [yblessing@manchester-industries.com](mailto:yblessing@manchester-industries.com). In addition, Fuji

Enovation is making small quantities of Monterey Gloss available to manufacturers seeking SWOP Certifications by calling Don Schroeder at 800-877-0555 or emailing him at [d\\_schroeder@enovationgraphics.com](mailto:d_schroeder@enovationgraphics.com)

***How long will my SWOP Certification last?***

Your SWOP Certification is valid for two years. At that point the system must be recertified. You can either re-certify your system as is, or it can be recertified with changes. You can find an application form for re-certification at [www.swop.org/certification.html](http://www.swop.org/certification.html).

***I am a printer, not a manufacturer. Can I get my shop SWOP Certified?***

At present, SWOP, Inc. has no procedure to evaluate and certify that a production operation is SWOP compliant. It is considering just such a concept however. Stay tuned.

***Does SWOP Certify individual Components of a System?***

No. The SWOP Certification applies to a system as configured for the certification process, as specified in the Application Data Sheet (ADS). Individual components of a system are not, by themselves, SWOP Certified. For example you cannot buy a SWOP Certified RIP. Only the system is certified.

***May Certified Manufacturers use the SWOP Trademark?***

The SWOP Certification Mark may be used by manufacturers of SWOP Certified Systems to identify components or materials that are part of that system.

## **SWOP Proofs**

***How can I make SWOP Proofs?***

The first requirement to generate a SWOP Proof is that you must be using a SWOP Certified System. In addition, you must follow the directions for that system that are contained within the downloadable Application Data Sheet. Each system is a bit different in setup for the SWOP Proof, so you must follow the directions for that system.

***How can I find someone to make SWOP Proofs?***

Currently SWOP does not maintain a list of providers for SWOP Proofs. We plan to do so in the future. In the meanwhile, the best strategy is to review the list of SWOP Certified Systems and contact your SWOP Certified Manufacturer to find someone who owns a SWOP Certified System in your area. There is a good chance that those who own a SWOP Certified System will produce SWOP proofs. See [www.swop.org/certmfg.html](http://www.swop.org/certmfg.html).

***How do I find out if a proofing system is SWOP Certified? If a system is not certified, how can I help it become certified?***

SWOP, Inc. publishes a list on its website ([www.swop.org](http://www.swop.org)) along with the Application Data Sheets of those systems that have been certified. If your proofing system is not certified, you can ask your system vendor to apply for certification. Your vendor can find applications at [www.swop.org/certification.html](http://www.swop.org/certification.html).

***I have a proofing system that indicates it has been SWOP Certified. How do I set it up to ensure my proofs conform to SWOP specifications?***

SWOP Certified systems MUST provide an Application Data Sheet (ADS) that gives instructions on how to make a SWOP proof. You can find the ADS of any certified system on the SWOP website ([www.swop.org](http://www.swop.org)). If you have problems carrying out the instructions on the ADS, contact the vendor.

***My SWOP System was certified using Textweb proofing stock? How can I produce SWOP proofs when I run out of this paper stock?***

If you run out of Textweb stock, you must refer to the ADS for your system and match the paper as closely as possible using Brightness, CIELab and density numbers as a guideline. Contact your SWOP Certified Manufacturer for further assistance.

***Is there anyway I can get the proofs I produce in my shop certified by SWOP?***

SWOP, Inc. certifies proofing systems, indicating only that a system is capable of producing a SWOP proof. SWOP has no formal process to indicate whether any individual proof has been accurately produced according to the Application Data Sheet or that it represents an accurate SWOP proof. SWOP hopes that the market will develop such proof validation products.

***Can I use the SWOP logo on my proofs?***

No. SWOP is a registered trademark of SWOP, Inc. and is not used to describe or imply any characteristics or endorsement of a product or service. However the word SWOP<sup>®</sup> can be used in a descriptive manner, such as, “This proof is made to SWOP Specifications” or “This proof was produced on a SWOP certified Proofing System.”

***I understand that SWOP has established a method to verify a proof's conformance to the manufacturer's Application Data Sheets. How can this verification be obtained?***

SWOP, Inc. does not have a program to “certify” any user for producing proofs to SWOP specs (i.e., to the ADS). However, we do have a method to verify if the proof is produced to the ADS. This is a relatively simple measurement of the color bar to see if it is within the tolerances set in the ADS. The SWOP Laboratories can do this for a fee or you can do it yourself. Don't forget that a proof without a color bar as described in the booklet is NOT A SWOP PROOF.

## ***Printing Standards***

***What is the difference between SWOP standards and SWOP specifications?***

SWOP is not a standard in the formal sense. It is a specification. National and international bodies such as ANSI and ISO have formal procedures for defining and documenting what are called accredited standards. The procedures include free and open participation by all interested parties and approval of proposed standards by a thorough consensus process. SWOP refers to many of these accredited standards as part of its specifications.

***Are there Standards describing the measurement of ink density and colorimetry?***

CGATS (Committee for Graphic Arts Technologies Standards) is an accredited standards body of ANSI (American National Standards Institute). The goal of CGATS is to have the entire scope of printing, publishing and converting technologies represented in one national standardization and coordination effort, while respecting the established activities of existing accredited standards committees and industry standards developers. CGATS Specifications, *CGATS.4* and *CGATS.5*, document standard methodology for measurement of density and colorimetry. These documents can be obtained at <http://www.npes.org/standards/cgats.html>.

***Does SWOP, Inc. have any relation to CIP3 and CIP4?***

The Print Production Format (PPF) from CIP3 is a method of passing information from the pre-press department to the press and bindery about a specific job. Perhaps most relevant for SWOP is that it can carry a low-resolution image of the marks on a page that can be used to derive ink-key pre-settings on press. CIP3 has now become CIP4, and has released the Job Definition Format (JDF) Specification, an XML-based job ticketing standard that goes well beyond the data carried by PPF. There are a number of places in which a job ticket can usefully carry color process control data, and it's perfectly possible to use the numbers from the SWOP specification, whether in terms of dot gain, etc., or using the newer

colorimetric approach with ICC profiles. More information about JDF is available on the CIP4 website ([www.cip4.org](http://www.cip4.org)).

***What is the relationship between SWOP and GRACoL?***

SWOP, (Specifications for Web Offset Publications) focuses on providing guidelines and specifications for web offset publication printing. GRACoL (General Requirements and Applications for Commercial Offset Lithography) focuses on providing guidelines and specifications for commercial offset, sheetfed printing processes. Each group provides general best practices and procedures for publication printing. The new alliance between SWOP and IDEAlliance will mean a closer working relationship between SWOP and GRACoL as well as developing print production guidelines as a collaborative effort.

***Do Canadian printers follow SWOP standards?***

The Canadian Publishing industry and SWOP work very closely together to develop specifications for magazine publishing which are very similar. The Canadian counterpart of SWOP (a U.S. organization, SWOP, Inc.) is called dMACS, “Digital Magazines Advertising Canadian Specifications.” More information is available on their website ([www.dmacs.org](http://www.dmacs.org)).