



ICCS 2.1

for accurate and consistent colors on
ICC-compliant digital color printers



Compliance to



International Color Consortium
(ICC) standards



Get Accurate Consistent CMYK Color

Digital color printers have inherent instabilities. Machine drift, humidity changes, temperature fluctuations, ink/toner variation, and parts deterioration all contribute to inaccurate color printouts.

Drawing on more than a decade's experience in the science of color printing, Focoltone has developed the Focoltone Intelligent Color Calibration System¹. It brings digital printers closer than ever before to accurate CMYK color output.

Reliable and highly effective, the Focoltone ICCS program incorporates advanced Artificial Intelligence techniques to analyze and correlate your digital printer's color output to truer CMYK color. It comes with the dual-purpose Focoltone Calibration Chart, which facilitates the color calibration process and provides a high-quality, offset-printed visual reference target for your printer's output.

It is an inexpensive and ideal tool for maintaining color consistency and fidelity, whether in a singular or distributed print environment.

Compliance to International Color Consortium Standards

The International Color Consortium (ICC) has published a standard defining the structure of ICC profiles to aid in print color management. Unfortunately, there is a current lack of methodology to verify a printer's ICC profile as correct for it to achieve accurate color output.

Focoltone ICCS is ICC-compliant and acts as an external 'ICC profile verification tool'.

Focoltone ICCS is applicable to all high-end digital color printers that support ICC profiles.

Benefits of Focoltone ICCS

Color Accuracy

Focoltone ICCS calibrates your printer to print colors based on the international Focoltone Color System, an established CMYK color matching system used worldwide. Focoltone ICCS provides an instant means of visual verification using the Focoltone Calibration Chart, ensuring the accuracy of your printer's color output.

Color Consistency

Focoltone ICCS can be performed repeatedly for consistent Color OK! output regardless of printer conditions. Focoltone ICCS also works across digital printers of different makes and models.

Fast & Easy Results

Users with little experience and knowledge will find the user-friendly interface and simple five-step process remarkably easy in setting up a Color OK! printer.

Cost Efficiency

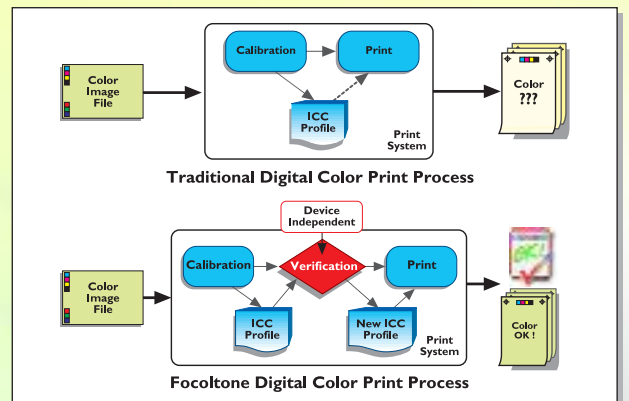
By ensuring that your print quality is ideal for every print, you save on reprints, remakes, and rejects on your color printouts.

Competitive Advantage

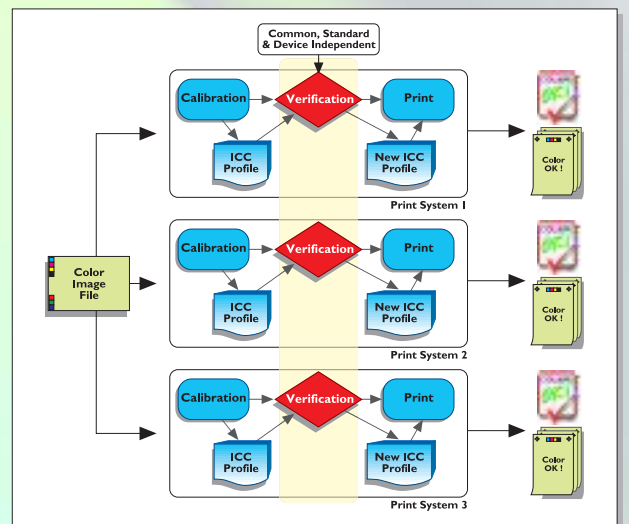
Having a quick, effective and reliable method to calibrate your printer color output accurately keeps you a step ahead of your competition.



Focoltone ICCS User Interface



Focoltone ICCS improves the traditional color print process with a device-independent color verification step.



An example of a common, standard and device-independent color verification procedure applied on three different print systems to standardize their color outputs.

¹ Patent pending.

How Focoltone ICCS Works



PRINT

Test Sheet

- With the Focoltone ICCS program, a Test Sheet containing a set of CMYK color values is sent to your printer.
- The resulting printout shows how your printer interprets and prints out these color values.



Focoltone Test Sheet



COMPARE

Test Sheet against
Focoltone Calibration
Chart visually

- The Test Sheet is designed to fit behind the Focoltone Calibration Chart window cutouts.
- Upon visual comparison, your first Test Sheet would probably reveal a set of colors differing from the target Focoltone Calibration Chart, which is offset printed.



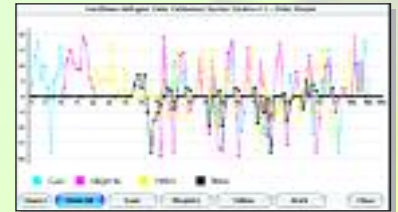
Put the Test Sheet below the Focoltone Calibration Chart and scan



SCAN

Focoltone Calibration Chart
and printed Test Sheet

- When you scan the Test Sheet and Calibration Chart together, the intelligent program extracts color data from the scanned image composite.
- The program then conducts a negative color comparison by detecting color differences, especially color contamination², between the Test Sheet and Calibration Chart to determine the printer's color variance levels.



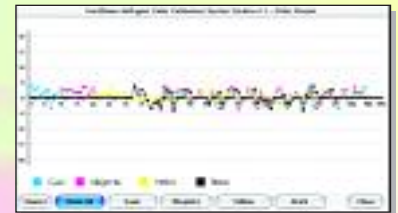
Color Analysis Before Focoltone ICCS Calibration



COMPENSATE

Automatically with
a new ICC profile

- Based on the knowledge gained from the color analysis, the program automatically calculates the adjustments required of the printer, using Artificial Intelligence, to match the target colors on the Calibration Chart.
- Focoltone ICCS compensates for the differences by means of a new ICC profile.



Color Analysis After Focoltone ICCS Calibration



REPRINT

The Test Sheet to
verify your improved
Color OK! results

- When a calibration cycle is complete, simply print out a second Test Sheet.
- Comparing the new Test Sheet against the Calibration Chart will show a marked improvement after calibration.



Print another Test Sheet to verify that your printer is now Color OK!

² The state of inaccurate colors adulterated by unnecessary colorants in referenced CMYK colors.

Make Your Printer Color OK!

Focoltone ICCS uses advanced Artificial Intelligence techniques and a color verification step to raise digital color printers to Color OK! standards. Color OK! refers to the ability of a print device to produce accurate CMYK colors consistent with offset process color standards.

Color verification is done by means of the offset-printed Focoltone Calibration Chart based on the CMYK Focoltone Color System and subject to stringent quality checks. It is an excellent visual target color reference for print outs to compare for accuracy.

Focoltone ICCS provides a practical, repeatable and reliable solution for CMYK color print standardization based on the patented Focoltone Color System³ and Focoltone Digital⁴. Using Focoltone ICCS, your printer is certified Color OK! as an accurate, consistent and reliable color output machine!

Features of Focoltone ICCS

- Functions as an Adobe Photoshop plug-in
- Artificial Intelligence technology developed and designed by KiKUZE
- Acts as an ICC profile verification tool
- Visual verification with Focoltone Calibration Chart
- Easy-to-use computer interface
- Simple five-step process even for beginners
- Little experience and knowledge required of user
- Five minutes to set up a Color OK! printer

Benefits in a Nutshell

- **Color Accuracy** to near offset CMYK standards
- **Color Consistency** on singular and multiple printing systems
- **Fast & Easy Results** with simple five-step process
- **Cost Efficiency** with instant payback on investment
- **Competitive Advantage** to value-add your business offering

Who Should Use Focoltone ICCS?

- Design Houses
- Advertising Agencies
- Distributed Print Shops
- Printing and Proofing Houses
- In-house Digital Color Printers

Focoltone ICCS Includes:

- Focoltone ICCS Installation CD (plug-in to Adobe Photoshop)
- Focoltone Calibration Chart (Target)
- Focoltone ICCS Installation & User Manual

³ Patent Number EP0119836.

⁴ Patent Numbers US5,953,990, WO97/42033, DE69707227D or EP0836556.



Operating Requirements

1. Minimum System Requirements

Macintosh Computer

- Power PC Processor
- Mac OS software versions 9.x onwards
- 350MB available RAM
- 200MB available hard-disk space
- 24-bit display monitor, at least VGA (640 x 480) or above
- Double-speed CD-ROM drive
- Adobe Photoshop 6 or above

Windows Computer

- Pentium III or above processor
- Microsoft Windows 2000 / XP
- 256MB available RAM
- 200MB available hard-disk space
- 24-bit display monitor, at least VGA (640 x 480) or above
- Double-speed CD-ROM drive
- Adobe Photoshop 6 or above

2. Minimum Printer Requirements

- A high-end digital color output machine
- Basic CMYK output must be of a good density
- ICC-compliant

3. Minimum Scanner Requirements

- Minimum 24-bit
- 300dpi scan capability
- Minimum image scan size of 11.68 by 8.27 inches or 297 mm by 210 mm (A4)



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