

SPEC*PRINT

Spec*Print is a scanner-based system for judging all types of print quality.

It is your one stop answer to the wide range of print quality issues facing the printer, ink and substrate suppliers.

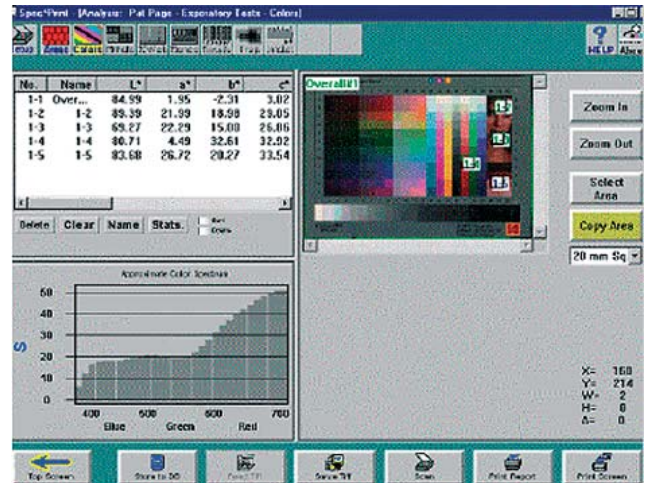
This system is primarily aimed at post press measurements giving the pressmen qualitative answers to the problems facing them. The pressmen is given the ability and tools to accurately produce jobs to the customers approved specifications, reduce set-up time and materials and increase the yield.

The system gives press side data including density, mottle, pin holing, press bounce, gear harmonics, plate harmonics, press impression and sticky back, trap, CIE LAB color analysis and parameter numbers, bar code, color balance, tone compensation and ink-jet measurements.

Operation

The pressman simply chooses the test that he wishes to run, identifies the specimen to be tested, places the sample on the scanner glass and clicks on scan.

The software then acquires the image digitally, analyses it and allows the pressmen to make more detailed analysis if necessary. The data is then portrayed on the screen, printed out and/or exported to a database. From screens like the one above, pressmen can quickly tell where on the sample print problems are, and can make corrections. They can zoom in on the area of concern and can see the defect.



Features

- Test set-up parameters are easily set and password protected (there are no pull-down menus to remember or work with)
- Gives the advantage of providing accurate, repeatable, reproducible and verifiable information quickly and economically
- From a statistical point of view huge numbers of sample measurements (billions) can be gathered, sorted, analysed, plotted and cause and effect conclusions
- Useful for evaluating inks and ink formulas (viscosity's and pHs), paper, ink and press set-up combinations, press efficiency
- All types of printing can be measured to include offset, flexo and ink-jet
- 4 step easy operation; select the test, enter sample identification data, scan sample and print data
- Most importantly the finished printed project can be measured back to the customers specification

Standard system

The standard system includes :

- Spec*Print 2000 software
- Hewlett Packard 6100c x 600 dpi flat bed scanner that will measure up to an 21.6 x 35.5 cm sheet

Modules

Areas module

Measures the amount of ink voids, ink clumps, ink lay-down or "mottle" on the substrate. Helps to determine the cause that may be coming from the press set-up, ink or substrate formation.

Colors module

Measures the CIE LAB colors over a designated area of a printed sample. Useful in comparing the finished print to the original artwork and to determine the most economical ink formula. Areas of a sample can be magnified for better analysis and viewing of color data. $L^*a^*b^*$, $L^*C^*h^*$, $L^*u^*v^*$, CIE xyY and other color measurement scales are given.

Pinhole module

Measures the small spots were the top down ink did not cover the substrate or first down ink.

X-web module

Measures the sample across the web giving data useful for dramatically showing press cylinder bounce, gear harmonics and bounce, plate harmonics, sticky back harmonics and press fingerprinting in general.

Coverage/separation module

Measures the coverage area by process color for estimating ink usage, and minimizing ink cost, using UCR, GCR, or user-input separation schemes. Also useful in identifying ink trapping and composite color problems.

Bar code module

Measures the bar code giving data for the density of each bar, the length and width, distance between the bars, spots, and voids, print gain and other ANSI measurements of the printed bar code; both positive and negative.

Trap module

Measures the trap characteristics of a printed sample. The first down density can be seen as well as the second and third down ink over the substrate. Solid ink coverage, color analysis, positional register, tone reproduction (including Stochastic) and trapping are analyzed.

Ink-jet module

Measures how well ink-jet papers accept ink, wicking and bleeding, bleed through, inkjet inks reaction to papers and how well an ink-jet printer is operating.

"Partners in Quality"