

SPOTLIGHT

>> 'Test Sheet' for Digital Output

>> **New from TechnologyWatch, Resometer software evaluates resolution for digitally printed images. The \$374, computerized tool provides standardized, electronic contrast measurements using actual job stock. (A test form is shown below.) www.myresometer.com**

New electronic imaging software from TechnologyWatch allows users to measure, in a standardized way, the performance of digital printing systems on the actual printed substrate. It also works on other imagers, such as platesetters, imagesetters and inkjet devices.

Called the Resometer—the name is a combination of resolution and meter—it is an EPS computer file that, when dropped and played on an electronic printing device, evaluates the resolution of both the RIP and image output device. It measures image quality across the entire imaging chain (RIP, printing device, paper) to determine resolution. The

Resometer accomplishes this by measuring the recorded image in terms of contrast-resolution, addressability, quality of small type and fine lines, smoothness of gradients, directional tone value changes and differences in RIPping of vector and bitmap images, to name a few.

The Resometer test form (below) is made up of nine targets (below) is the most telling, says its inventor, is the contrast-resolution test target because it permits evaluation of obtainable resolution as a function of contrast, independent of the imaging technology.

There has been no real standardized, practical reference tool to measure recorded image quality and resolution of electronically printed images, says Henry Freedman, the Resometer's inventor, who developed the device with Swiss imaging target expert Franz Sigg. Until now, he says, printers have not had an analytical tool to measure an electronically printed image that is practical for trade production environments.

"If you can't measure it, you can't control it," he says, which is what led Freedman to develop the product, after a series of published experiments matching digital to offset printing. "What's most exciting is that the manufacturers of the RIPs and digital presses have found it to be a very valuable tool," he notes.

"To date, we have not seen any other tool that can do what the Resometer has done in helping us manage our imaging," says George Stephenson, president of Stephenson Printing, Alexandria, VA. Stephenson uses it to test its CTP systems, many RIPs, a Xeikon digital color press

and a variety of digital proofing systems—including Kodak Approval, Varis inkjet and Epson inkjet. "The Resometer is an affordable key measurement tool for managing all our imaging systems," he says.

A key feature of the software is that it evaluates the performance of the RIP with the printing device it is driving. "The RIP has as much of an influence on image quality as the imaging system," says Freedman.

In turn, the software helps printers select RIPs to drive output devices. Freedman says the Resometer allows printers to determine if the output from the printing device matches the resolution settings on the RIP. It also measures how a given paper will influence resolution, as well as toner and ink levels.

When the U.S. State Department's print unit installed the Resometer, it discovered its output device was not performing at the resolution claimed by the manufacturer. Mark Lundi, director of Global Publishing Solutions, then contacted the vendor to adjust the settings.

Another user, Wahid Bastoros, GM of Micropage, New York City, says, "The Resometer software allowed us to refine our relationship with the technical support department of our digital press vendors because we have a visual guideline that shows any deficiencies. Also, it allows us to compare different RIPs on the same press with different variations of paper stock."

Freedman, the inventor, is a third-generation printer, print scientist, publisher of the *TechnologyWatch* newsletter and *GAM's* technology editor.

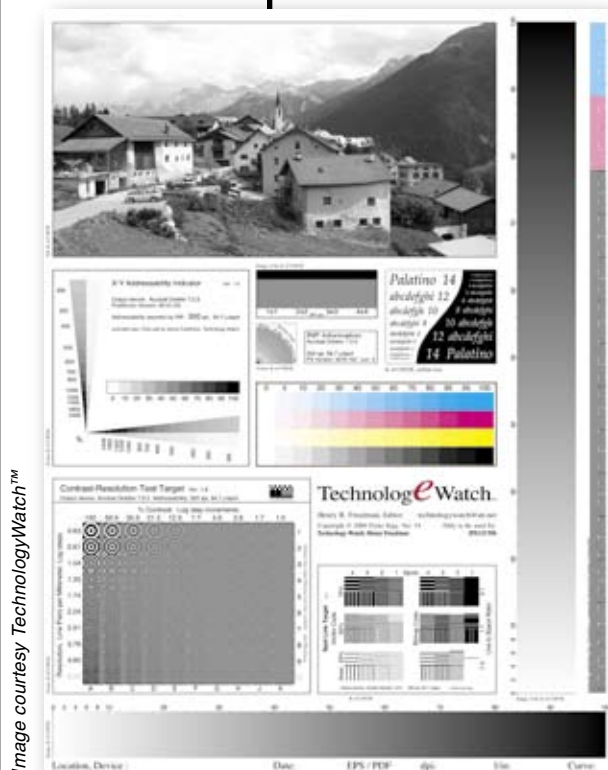


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