The 1999 GATF InterTech Technology Awards
The 1999 GATF InterTech Technology Awards

Inaugurated in 1978 to foster awareness and understanding of advanced graphic arts technology, the GATF InterTech Technology Awards honor innovative technology excellence for the graphic communications industries. Historically the awards mirror industry interest in environmental issues, standards, quality control, electronic controls and systems, digital printing, and desktop production. Over 80 percent of the previous winning technologies are in use today in the graphic communications field.

In 1999 we saw a 31 percent increase in nominated technologies. A record breaking 46 nominations were weighed by a selection committee comprised of industry technical experts and users. Technologies must be recently developed, proven in industrial application, but not yet in widespread use.

This year’s awards include the first digital camera to win an InterTech Technology Award, as well as two technologies for flexographic and gravure printing. The 1999 awards also include a product that did not use software, electronics, or “high-tech” methods, but was simply innovative in integrating labels into an in-line workflow.

I am pleased to announce the 1999 GATF InterTech Technology recipients:

- The Agfa Apogee PDF Production System from Agfa-Gevaert NV
- Samba Screening from BARCO Graphics, Inc.
- Croda Integrated Label System from Croda Adhesives, Inc.
- Grafix CoCure® Process from Grafix North America, Inc.
- Polar Compucut with CIP3 Workflow from Heidelberg USA, Inc.
- Sunday 4000 Press with Autoplate® from Heidelberg Web Systems
- MarkzScout from Markzware Software, Inc.
- LASERSTAR from Max Daetwyler Corp. (MDC)
- LightPhase from Phase One
- Color Control System (CCS) from QuadTech, Inc. (QTI)

Representatives of the winning technologies are presented a Lucite star award at the Graphic Arts Industry Summit—a joint annual meeting that includes GATF, Printing Industries of America (PIA), and National Scholarship Trust Fund. The 1999 conference takes place November 5-9, 1999 in San Antonio, Texas. Prior to the awards banquet, GATF staff and representatives of the winning technologies introduce the technologies to industry leaders in attendance through a panel discussion.

This presentation booklet features descriptions of the award-winning technologies and all other 1999 nominees. Winners are featured in the first part of the booklet, while all other nominees are described in the second part of the booklet.

GATF is proud of its sponsorship of this award in its 21st year of promoting excellence in technology. We strongly urge all companies to share their latest technologies with the industry by submitting entries for the 2000 InterTech Technology Award. For details please contact Richard D. Warner, GATF Vice President and Director of Research, at 412/741-6860, extension 581.

Gerald A. Henseler, Chair
GATF Board of Directors
The Agfa Apogee PDF Production System
AGFA-Gevaert NV

Samba Screening
BARCO Graphics, Inc.

Croda Integrated Label System
Croda Adhesives, Inc.

Grafix CoCure™ Process
Grafix North America, Inc.

Polar Compucut with CIP3 Workflow
Heidelberg USA, Inc.

Sunday 4000 Press with Autoplate®
Heidelberg Web Systems

MarkzScout
Markzware Software, Inc.

LASERSTAR
Max Daetwyler Corp. (MDC)

LightPhase
Phase One

Color Control System (CCS)
Quad/Tech, Inc. (QTI)

MicroPress® Cluster Printing System
T/R Systems, Inc.
The Agfa Apogee PDF Production System

Agfa-Gevaert NV

Agfa, a worldwide leader in digital workflow solutions, has created the Apogee PDF production system for users who are transitioning from analog to digital workflows. Apogee builds a digital bridge between the creative, prepress, and production environments, ensuring that job data can be exchanged quickly, easily, and predictably. In 1997, Agfa determined that Adobe's Portable Document Format (PDF) could be that bridge, and placed PDF at the core of its Apogee production system. Apogee was the industry's first workflow management system to implement the concepts of using PDF as a digital master and rendering just-in-time for various output devices and media.

The PDF-based Apogee system consists of three modular components: the Apogee Pilot, Apogee RIPS, and the Apogee PrintDrive output manager. Apogee employs a completely open system architecture that allows users to implement one, two, or three Apogee modules, or to mix and match the Agfa components with their existing prepress equipment.

Three Apogee components work together to produce a PDF digital master. PDF job tickets are created within the Apogee Pilot to define job and output specifications, without altering the master, so that content can always be repurposed. PDF files are rendered just-in-time to output devices and provers, which are driven by the Apogee PrintDrive automated output manager. Because the entire Apogee system is based on open industry standards PDF and Extreme, users enjoy the benefits of a reliable, compact file format and options for late-stage editing.

As growth-oriented companies realize that print must be competitive with other media, Apogee positions them to expand their business by offering many output options. Apogee and PDF become the production center for content, allowing output to proofer, platesetter, digital press, CD-ROM, or the World Wide Web—all from the same digital masters.

"Apogee has enabled us to fully integrate PDF into the workflow, making an incredible difference for both printers and designers," said one judge.
Samba Screening

BARCO Graphics, Inc.

Samba Screening is a mixture of stochastic screening technology and classic screening technology designed for flexo and silk screen printing applications. Samba Screening was created to enable printing of clean highlights and deeper shadows without loss of detail in flexo (down to 0 percent), even beyond what an anilox roller would normally support without "dot dipping."

The screen starts as a true stochastic screen with a selectable dot size, which allows for a perfect match to the anilox roll. Around 50 percent, a true classic screen is formed, with screen angles and rulings that result in moiré-free classic screens. In between, the screen transforms itself smoothly from a stochastic into a classic pattern. In the meantime, the dots grow following the required density.

The improvement is explained through the revolutionary technology behind Samba Screening, which not only uses normal stochastic and classic dot positioning but also an endless set of in-between patterns. As a result, there is no break between the previously incompatible classic and stochastic patterns. Instead, the Samba Screening runs over a big number of patterns with always increasing classic features and diminishing stochastic features. In the highlights, the dot pattern is stochastic, while at 25 percent, dots come nearer to the classic theoretic center and the distance from that center is based on the original stochastic pattern. You see the dots "dancing around" the classic center. Finally, at 50 percent, the dots are fully on the classical grid.

Customers confirm that additional benefits of Samba Screening include whiter highlights without highlight breaks, manageable and lower dot gain, longer range (0 to 100 percent), and no visual transitions between stochastic and classic screens, making it a valid competitor for gravure quality when combined with the Barco Cyrel" Digital Imager.

"This enables printers to pursue offset jobs and convert them to lower-cost flexographic jobs without losing quality,” commented a judge.
Croda Integrated Label System

Croda Adhesives, Inc.

This new technology enables printers to bring label production in-house. The Croda Integrated Label System uses an adhesive that meets United States Postal Service regulations and a release coating process that is flexo-applicable.

Crodamastic UV-curable silicone or water-based release coating is flexo-applied to one panel. The permanent or repositionable hot melt or repositionable water-based adhesive is applied to the adjacent panel. Lastly, the panels are then plow-folded and kiss-diecut to produce an integrated, level sheet that eliminates the surface imbalance associated with tipped-on liner.

Because two panels unite to form one continuous surface, the 4-mm imbalance created by tipping on release liner and pressure-sensitive stock is eliminated. The result is a smooth, single-surface product that stacks flat on skids. Since the Croda Integrated Label System creates one continuous label surface, printers get a product that features a more finished and professional look and feel. Additionally printers can print or image directly under the release coating to convey additional messages to customers after they have removed the label.

This technology, in effect, allows wide- or narrow-web printers to become pressure-sensitive label converters. Scheduling and inventory costs are avoided by not purchasing release liner and adhesive-coated face stock from an outside source. Waste is decreased with the ability to pattern-apply release coating only in the areas needed. By integrating the label in-line, printers are able to produce higher quality labels significantly faster and at a substantially lower cost.

"This should really benefit direct mail customers," a judge remarked. "And by bringing the label in-line, this simplistic yet innovative process will open the door to creativity."
Grafix has taken in-line coating to the next level,” explained one judge.

Grafix CoCure™ Process

Grafix North America, Inc.

UV coating achieves the highest gloss levels and rub resistance protection of any coating application currently available to the sheetfed printer. In the desire to achieve the UV look and feel, the majority of UV coatings used in the sheetfed market are applied via a dedicated second pass on a machine specifically designed for this process, a complete UV equipped press, or with the recently introduced double coater presses.

Grafix North America’s goal was to develop and refine a technique in cooperation with leading ink and coating manufacturers that would allow UV coating to be applied in-line over a conventional ink, thus avoiding the costs and drawbacks associated with the above alternatives. The revolutionary hybrid CoCure™ process achieves this goal. The hybrid inks are treated like conventional inks on press, and with UV coating applied over them in-line the end result is exceptionally high gloss levels with minimal gloss-back even in the heavy ink coverage areas. Grafix North America recommends the use of a single-lamp UV interdeck to partially set or cure the ink and the use of a three-lamp final UV curing system in the press delivery for the UV coating.

In summary, Grafix North America has proven that the CoCure™ process is capable of providing in one in-line press pass, a level of gloss and rub resistance previously thought to be impossible with one coating tower and conventional inks. For existing UV coated work, or to create a new market niche by providing customers with the uniqueness of UV, the CoCure™ process is a proven, cost-effective method for sheetfed printers with a tower coater equipped press. The CoCure™ process is being utilized by a variety of U.S. sheetfed printers ranging from high-end commercial, automotive, and annual report printers to packaging printers in both existing and new markets.
Polar Compucut with CIP3 Workflow

Heidelberg USA, Inc.

Building upon Heidelberger Druckmaschinen's 1998 winning technology, the CPC 32 Prepress Interface, Polar Compucut is proprietary software offered by Polar-Mohr with distribution and service by Heidelberg USA, Inc.

It is operated on Microsoft Windows 3.11, Windows 95, and/or Windows NT and uses CIP3-compliant prepress data generated by any prepress impositioning unit that can create the standard PPF (Print Production Format) or IFC (Interface For Compucut) file. Compucut can be loaded on an existing or separate PC where the sheet geometry is read and programmed automatically by simply verifying the digital values with “Yes” or “No.” The cutting program is sent on-line to any number of Polar guillotine cutters.

The use of converted data from prepress reduces makeready time further, since all cutting information can be taken directly from prepress without any need to enter new parameters. The printed sheets need not be measured, which is a time-consuming procedure. The cutting programs are automatically optimized by the addition of relevant comments, functions, and operator information to ensure an optimal workflow.

The programs are then transferred to the cutting system on-line. When the user starts a new job, manual programming is no longer necessary. The job change is performed virtually without any programming setup time.

Process visualization on the color display of Polar ED cutters allows the operator to monitor the job. This facilitates and accelerates material handling and prevents errors. A printer connected to Compucut outputs all the program and sheet data, including the layout. This job documentation forms an essential part of quality assurance efforts.

By using CIP3-compliant prepress data to preprogram Polar cutters, Compucut makes it possible to digitally control and integrate manufacturing from prepress, through press, to postpress. It significantly increases the efficiency of cutting by reducing makeready time and supplying comprehensive, up-to-date information.

"By applying CIP3 standards to the bindery, Heidelberg has brought the postpress into the digital workflow," noticed several judges.
Sunday 4000 Press with Autoplate®

Heidelberg Web Systems

The 48-page Sunday 4000 web press incorporates Sunday Technology—a system of integrated features including gapless press blankets that allows printers to print faster on wider webs with superior quality, increased efficiency, and reduced waste. The Autoplate® feature, applied for the first time on a large-format 48-page press, substantially reduces operator involvement and changeover time by automating the plate changing process.

To initiate a plate change on the Sunday 4000 press, an operator inserts new plates into cassettes attached to each of the printing units while the press is running. The fully automatic plate changing sequence can then be activated from the press console, and plates on all printing units can be changed simultaneously. The cassette first moves into position, and the old plate is pneumatically unlocked and reversed off of the cylinder and into the cassette’s holding area. The lead edge of the new plate is then inserted into the cylinder gap, and the new plate is slowly and precisely rotated onto the cylinder. Finally, pneumatic lockups are engaged to secure the new plate, and the cassette containing the old plate moves back into static position.

The Autoplate system lowers operating costs and increases productivity by substantially reducing makeready time. A single operator can change all of the plates in less than five minutes without removing the web. That saves an average of 25 minutes at every plate change compared with a conventional press and makes the Sunday 4000 especially efficient and productive for short and medium run lengths requiring frequent changeovers. Autoplate also significantly reduces manpower requirements through automation and the fact that operators can complete other changeover tasks during the time that they would otherwise have to manually change the plates. Makeready time is further reduced by automated pneumatic lockups on the plate cylinders that provide more consistent plate positioning and tensioning and faster registration.

"Although automated plate changers have been available for years for other press sizes, it was a major engineering accomplishment to bring this technology to a 48-page web press," a judge said.
MarkzScout

Markzware Software, Inc.

MarkzScout is a workflow toolkit that can automatically transition native digital documents. It examines job elements in native documents and separates the files according to the type, characteristics, or contents of those files. It works with any prepress workflow system such as the Scitex Brisque and Agfa Apogee. Built into MarkzScout is technology that will process documents from QuarkXPress, PageMaker, FreeHand, Illustrator, Multi-Ad Creator, EPS, PDF, TIFF, and JPEG.

Among its many uses, MarkzScout can be set up to monitor a "hot" folder. Files placed into this hot folder can be routed to various locations based on custom checking criteria. Criteria can be controlled by user-definable rules for extremely quick preflighting decisions and a more efficient workflow. For example, MarkzScout can sort through a folder of thousands of images and separate non-RGB images to one work folder while transferring all RGB images to another work folder in seconds—ready for manual conversion. MarkzScout can even coordinate a fully automatic conversion if so desired.

MarkzScout can also automatically route incoming Mac jobs to a Mac workstation and PC jobs to a PC workstation.

As the first prepress workflow solution to automatically transition native digital documents, MarkzScout allows anyone to quickly and easily disposition digital files for prepress work. It sorts, filters, or categorizes files according to any criteria chosen, and it saves users enormous time by automating repetitive, time-consuming tasks in the prepress workflow.

"This software will save an enormous amount of time in preflighting. It's worth its weight in gold," said a judge.
LASERSTAR

Max Daetwyler Corp. (MDC)

The MDC LASERSTAR, a high speed, high-resolution engraving machine, offers a revolutionary approach for the generation of gravure cylinders for the packaging and publication markets, and it is an alternative to electro-mechanical-based engraving technology.

The LASERSTAR engraving system is capable of producing 70,000 cells per second directly into a zinc metal surface. The system can produce conventional and autotypic gravure cell configurations as well as special screens that provide high-resolution type reproduction capability, not available with conventional engraving technologies. The resolution capabilities of the system range between 70 and 200 lines/cm and are optimized for the print applications and substrate requirements.

The speed of the LASERSTAR allows for the use of a single head at 70 kHz, as compared to up to 14 heads at 4–6 kHz/head typically found in conventional publication engraving machines, eliminating any potential imbalance problems between ribbons.

For packaging applications new screen configurations such as Masterscreen allows the highest resolution and maximum cell depth by combining up to seven cells into a combined Mastercell for maximum cell volume, but retain the ability to address each individual cell to represent the highest resolution contour of line work files.

Since the LASERSTAR is using a noncontact imaging technology it eliminates any wear associated with mechanical tools and provides for a fully automated production system, eliminating the need for operator intervention.

It is driven by MDC's digital front-end, using standardized input data formats for CT/LW. This data is converted into gravure cells that are conventionally angled to assure a high degree of color stability, eliminating moiré and color shifting.

The MDC LASERSTAR brings a new level of productivity and quality to the gravure process, provides the means to reduce cycle time of cylinder manufacturing, and opens new business opportunities for this high-quality printing process.

"This technology breakthrough that allows gravure to use lasers will spur innovation throughout the gravure industry. Ultimately, it could lead to the development of more cost efficient cylinder-base materials and, coupled with its speed and automation of the process, could transform gravure into a more mainstream printing process," said a judge.
LightPhase

Phase One

Phase One's new single-shot LightPhase features a 2,000x3,000-pixel resolution and generates RGB file sizes of 18 MB with 8 bits per color and 36 MB with 16 bits per color. An image can be captured every 1.5 seconds, with subsequent image capture limited only by the user's computer hardware system. Additionally, the flexible light requirement of the LightPhase enables an equivalent ISO of 50 and exposure times of up to 2 seconds.

For increased versatility and easy workflow integration, the LightPhase supports Hasselblad's full line of mechanical and electronic cameras as well as Mamiya's popular RZ67 model. Because the LightPhase is the same physical size as a film cassette, it functions easily as a hand-held camera and can be controlled by either the camera or the computer. A 15-ft.-long, flexible IEEE 1394 cable enables photographers to operate freely in the studio and on location.

Because the LightPhase operates on a standard IEEE 1394 connection, users can select which mobile computer to use as an imaging station—from the lightweight, miniature Sony Vaio Picture book to the ultrafast Apple Macintosh PowerBook.

In addition to basic image capture, using a palm or laptop computer allows for immediate verification of composition, exposure, and focus. It also allows fast Internet image transfer and accurate color management—all of which are impossible on built-in or proprietary image storage packs. The images captured can be developed on location for final checking to see if a re-shoot is required.

In essence, the LightPhase is ideal for a full range of applications including commercial advertising, portrait and fashion photography, moving objects, and still life. The fast capture speed of the LightPhase coupled with the significant advantages of digital imaging allow for maximum productivity. It delivers superior quality, versatility, and increased productivity in an easy-to-use package.

"Images photographed with the LightPhase can be viewed and then immediately emailed from one device."

noted one judge.
Color Control System (CCS)

QuadTech, Inc. (QTI)

QTI's Color Control System (CCS) is a closed-loop, video densitometer-based system that automatically controls color on web offset presses, thus reducing the subjectivity associated with color approvals. The CCS automatically searches for, locates, and tracks micro colorbars to relate color printing information to press operators. Each video capture of the micro colorbar relates real-time color measurements of solid ink density (SID), print contrast, trap, and dot gain to the press operator.

The CCS works by first measuring the color densities, bringing them into the specified range (based on parameters set by the operator), and then holding the color throughout the pressrun, for both target and visual settings. The CCS maintains the desired color density through a repeated three-step process of color measurement, process model estimation through prior SID error analysis, and corrective action, or ink keys adjustments.

The CCS uses patented video densitometer technology to measure and control color. The CCS's unique adaptive control methodology sets the system apart from the competition. This methodology is a QTI innovation resulting from 14 years of research and development. The result is that the CCS can automatically tailor itself to different press models and ink trains.

Not only can the CCS maintain color, but it also reduces color makeready time. Given target SIDs at the start of a job, the CCS immediately starts correcting for errors on all print units simultaneously as soon as the press starts up. Each surface has its own high-speed sensor that measures multiple patches for every color in each ink zone at press speeds up to 3500 feet per minute.

The CCS is an innovative and unique control system that applies video-based technology to improve the quality of web offset printed products.

"This easy-to-use tool for the pressroom will improve quality and reduce makeready waste due to color," said a judge.
MicroPress® Cluster Printing System

T/R Systems, Inc.

The mission-critical MicroPress® is a versatile, growth-optimized, short-run, on-demand, digital printing solution designed for production printing of both black-and-white and color documents. Instead of traditional digital printing product lines consisting of different printers made up of ascending performance, capacity, capability, and price, T/R Systems offers a single, modular, and growth-optimized solution that allows a customer to select a configuration that meets initial business needs and then be able to add capacity and capability as business needs grow.

The MicroPress Cluster Printing System consists of the powerful MicroPress ClusterServer®, MicroPress PrintStations, and a robust family of document management software applications. The ClusterServer manages the PrintStations as a "Virtual Printer"—a specified group of physical print devices managed by the ClusterServer application software to perform as a single printer. The MicroPress ClusterServer is the heart of the MicroPress Cluster Printing System. From this single, Microsoft® Windows® NT®-based server you can manage up to 12 total print devices including any combination of supported or endorsed black-and-white, color, and wide-format printers.

A fully configured MicroPress Cluster Printing System allows users to print from 24 to 496 pages per minute (ppm) in black-and-white, 6 to 48 ppm in fully calibrated color, and 83 to 2160 square feet per hour in wide-format color. Customers are also provided flexibility in output media and speed through the "mixed mode" environment that allows them to combine supported print devices on a single MicroPress ClusterServer.

The MicroPress Cluster Printing Systems' document production capabilities are well suited for applications such as on-demand book publishing, personalization, rapid reprint services, and color proofing, as well as the publishing of forms and statements, operations and training manuals, and sales and marketing collateral. It is configured for all types of printers including quick, commercial, in-plant, government and academic, and many other specialty printers.

"This system has significantly impacted the print-on-demand market by offering an affordable, powerful, midrange solution to corporate, commercial, quick printers, and others," said a judge.
1999 GATF InterTech NOMINEES

Agfa Galileo Thermal
Agfa Corporation
AgfaScan T5000 Plus
Agfa Corporation
Agfa IntelliTune Image Processing
Agfa-Gevaert NV
GoldenRetriever
BARCO Graphics, Inc.
Pageflex
Blitstream, Inc.
AQUA® LHP System
Citiplate, Inc.
ColorMouseToo! Colorimeter (CM2C)
Color Savvy Systems Limited
Staccato™ FM Screening
Creo Products, Inc.
Trendsetter Spectrum™
Creo Products, Inc. and Heidelberg USA, Inc.
DuPont Thermal Dylux®
DuPont Color Proofing
Sumo Luxel F9000 Imagesetter
Fuji Photo Film USA, Inc.
SpectroEye™
GretagMacbeth™
CP 2000 Control Console
Heidelberger Druckmaschinen AG
Exatronic Duo Plus with Advanced Powder Spray System
Heidelberger Druckmaschinen AG
ColorBlind Matchbox
Imaging Technologies Corporation
ColorBlind Prove it!
Imaging Technologies Corporation
Imation™ Color Fidelity Module (CFM)
Imation Corporation
Kodak Approval XP Digital Color Proofing System
Kodak Polychrome Graphics

Kodak DryView Recording Film
Kodak Polychrome Graphics
Fusion DFE™
Litbo Development & Research (LDR)
Auto-Count® 1000/3000
Logic Associates, Inc.
Roland 900
MAN Roland, Inc.
Asura®/Solvero®
One Vision, Inc.
PANTONE® Hexachrome
Pantone, Inc.
The Portalis System
Portalis, Ltd.
RenderView™ and Pixels On Demand®
RTImage Ltd. and Scitex America Corporation
Brisque Impose
Scitex America Corporation
Lotem 800V
Scitex America Corporation
SeeColor ROSETTE™ RIPS with HP DesignJet CP Series Printers
SeeColor Corporation & Hewlett Packard Company
Green Machine 13000
Therm-O-Type® Corporation
The Ultimate On-Q Server
ULTIMATE Technographics, Inc.
Digital Graphics Network
Vto North America
ACME Plate Reader
The Wyndam Group
500 Series Reflection
Spectrophotometers
X-Rite, Inc.
DTP41/T AutoScan Spectrophotometer
X-Rite, Inc.
Agfa Galileo Thermal

Agfa Corporation

The Galileo Thermal platesetter is the first high-quality digital platesetter to integrate thermal-imaging technology with internal-drum architecture to expose plates using stochastic screening. This technology offers more accurate pixel placement and a higher level of imaging precision than other methods.

Another critical innovation in the Galileo Thermal platesetter is the single-beam laser used to expose thermal conversion plates. This ensures that the exposure unit moves uniformly across both the x- and y-axes of the plate, eliminating artifacts and minimizing the impact of variation in pixel placement. The Galileo Thermal can expose either thermal conversion plates or thermal ablation plates, allowing printers to keep up with future technology.

The design of the Galileo engine supports simultaneous production of three plates, even when configured as a completely manual device. One plate can be loaded in a pre-imaging stage, with one in exposure, and another exposed plate ready for processing. Galileo's technology reduces costs, raises productivity, and increases quality.

---

AgfaScan T5000 Plus

Agfa Corporation

This professional prepress CCD flatbed scanner incorporates patented Agfa features. TwinPlate™ technology provides separate platens for reflective and transmissive originals, allowing preparation of additional plates while the scanner is in operation.

The preview scan button on the front of the scanner lets the system automatically crop images presented in the mounting templates and presents preview scans for color correction and other adjustments. A 10,200-element trilinear CCD, Agfa-built lenses, and illumination system insure the highest quality. A closed-loop feedback system continually monitors and adjusts for maximum color fidelity, reacting to changes in light.

Agfa ColorExact software, including Dynamic Batch™, is easy to use and provides a number of defaults and predefined settings for corrections such as tone curves and sharpening. This allows operators of all skill levels to achieve professional results. AgfaScan T5000 Plus has a particular impact on commercial printers by allowing them to scan in-house and control priorities based on the pressroom schedule.
Agfa IntelliTune Image Processing

Agfa-Gevaert NV

Agfa IntelliTune professional image processing software dramatically improves the quality and speed of image rendering for newspapers. Publishers often receive images from a variety of sources, or in a mix of digital and conventional formats, making color correction a special challenge. IntelliTune and Agfa’s Multi-Dimensional Processing (MDP) technology analyzes 250,000 spots in every image to produce unmatched sharpness, detailed rendering in black-and-white or color, and excellent tone and color balance.

IntelliTune and MDP software algorithms were specifically written to match newsprint characteristics, and automatically adjust black and white point settings, tone correction, contrast enhancement, color cast removal, skin tone, JPEG artifact removal, de-stairing, unsharp masking, color to black-and-white conversion and resolution calculation. With a highly user-friendly interface, IntelliTune handles intelligent previewing, resizing, and cropping. Running on a Macintosh platform, IntelliTune can be set to enhance image quality in either a fully-automated or interactive operating mode.

GoldenRetriever

BARCO Graphics, Inc.

GoldenRetriever is a fully integrated solution for archiving the masses of data in today’s prepress production environment. Operating under Window NT, GoldenRetriever is comprised of Barco’s GoldenRetriever software and a CD-ROM jukebox. Jobs are archived onto CDs to be read by virtually any of today’s popular computer platforms. Once the CDs are written there is an automatic verification process that assures that the data on the CD is correct. Further security can be attained by the creation of duplicated CDs for off-site storage.

Archiving is done in batch mode, allowing multiple jobs to be put onto a single CD. Archiving is initiated by adding a suffix to a job directory. The server monitors for jobs that have been assigned this suffix. Once found, files are moved into a hidden directory automatically and prepared for archiving.

Additional benefits of GoldenRetriever include the ability to write duplicated CDs, simultaneous archiving/restoring, and automatic verification of written CDs.
Pageflex™
Bitstream, Inc.

Pageflex Mpower is a suite of Internet-driven software applications that gives enterprise organizations the ability to design and produce customized marketing communications on demand. Mpower enables these organizations to transcend the limitations of "one size fits all" communications by tailoring messages to an audience, whether that's a group or a single individual. No matter how complex the project, Mpower can assemble it dynamically and deliver it instantly in print, PDF, or via the Web.

By separating content and form and enabling them to be easily and intelligently recombined, Pageflex Mpower lets users assemble pages on-the-fly, based on market profile or user preferences. It empowers an organization to capitalize on customer information stored in a database or collected via the Internet, and to use that information to tailor a marketing message directly aimed at individual customers. It allows for the repurposing of content to make them work in far more productive ways.

AQUA® LHP System
Citiplate, Inc.

Digital and analog plate technologies come together in the AQUA LHP System plate line, Citiplate's versatile family of high-speed, UV-sensitive aluminum offset plates that are silver-free and made for both CTP and film-based workflows.

Requiring just two to four percent of the UV energy necessary to image an ordinary conventional plate, Citiplate AQUA LHP System plates make computer-to-conventional-plate imaging a fast, practical, cost-effective alternative to thermal, argon-ion, YAG-sensitive, and silver-based CTP plate systems. Citiplate's breakthrough—high-speed, silver-free, UV-sensitive plate emulsions—makes possible AQUA LHP plates' high resolution (1–99 percent dots), digital imaging times comparable to other CTP systems on the market, and run lengths ranging from 20,000 to 2,000,000 impressions (with baking optional for extended runs)—all at very substantial CTP consumables cost-savings. AQUA LHP plates image equally well in digital-UV CTP platesetters, or with film via conventional UV exposure methods.
ColorMouseToo! Colorimeter (CM2C)

Color Savvy Systems Limited

Color Savvy's ColorMouseToo! Colorimeter (CM2C) product and name originated from the concept that just as a mouse is needed for navigating and controlling a computer, a measuring instrument is needed for navigating and controlling color. The CM2C is designed to provide density values for calibration and process control applications, and colorimetric values for profiling various output devices.

The CM2C colorimeter incorporates Color Savvy's unique SavvySensor™ technology. The SavvySensor™ is a patent-pending, dual-beam design that utilizes LEDs as the light source. The LED sensor technology allows the CM2C colorimeter to provide accurate and repeatable results in a compact, rugged, and cost-effective device.

The Color Savvy's CM2C colorimeter system includes CSConnect™, data collection software for Windows, and ColorMouse-Trap™ design and specification software for Macintosh, as well as all cables to run the device on both platforms. Moreover, the CM2C is supported by many popular third-party calibration, profiling, and process control applications.

Staccato™ FM Screening

Creo Products, Inc.

Staccato™ FM Screening is sophisticated stochastic screening technology that provides a new level of print quality without added manufacturing cost or hassle. It delivers presswork with superb detail, free of grain and moiré. Equally important, it yields extraordinary pressroom latitude, stability, and makeready.

The stability of Creo SQUAREspot™ thermal imaging makes Staccato viable for all discriminating printers. It is available with all Heidelberg and Creo plate-setters driven by Primergy™ and iMPAct workflows.

Staccato exhibits unique lithographic properties resulting from thinner ink films and better ink distribution. Staccato prints without excessive ink build-up, loss of tonal range, or mottled overprints, leading to lower ink consumption without sacrificing contrast, density, or press gamut. It is easily printed onto uncoated stock, plastics, and other exotic surfaces. Better light trapping protects the purity and saturation of colors with near continuous-tone quality. The random dispersion of dots also means less color shift when images are misregistered on press.
Trendsetter Spectrum™
Creo Products, Inc. and Heidelberg USA, Inc.

The Heidelberg/Creo Trendsetter Spectrum™ digital halftone proofing system is the semiautomatic Trendsetter® platemaking device equipped with a digital halftone proofing option. Using Creo SQUAREspot™ thermal imaging, as well as the same file, same resolution, same screening, and same drum, the Trendsetter Spectrum produces plates, film, and color proofs that match dot-for-dot.

The Spectrum system is designed to image digital proofing media from several market-leading vendors and to support spot colors as they are introduced. It delivers contract-quality proofs that are consistent proof-to-proof and machine-to-machine. Even at high screen rulings, a Spectrum-imaged proof consistently reproduces intricate features as well as fine highlight and shadow details. Uniquely capable of imaging both four- and eight-page proofs, the Spectrum is perfectly suited for quick-turnaround jobs, scatter proofing, and large-format proofing. An advanced media-handling mechanism takes care of cleaning, loading, and unloading proofing material entirely without operator assistance. Automatic registration on the Spectrum systems eliminates the manual registration of film-based proofing.

DuPont Thermal Dylux®
DuPont Color Proofing

A novel proofing product for CTP printers, the Dylux® is a paper-based media that yields instant images without processing. Sheets are coated on both sides with a photopolymer emulsion that produces a visible image upon exposure to 830nm wavelength light. This dual-sided high-gloss, 90-pound paper substrate measures 30.25×41.5 in. A full-sized sheet can be imaged in six minutes.

It is loaded in a manner similar to aluminum plates and imaged with the same optics, laser, and screening that will be used to image the printing plate. Once imaged, the media is stable in the dark, but it is possible to add additional images to a previously imaged sheet.

Dylux® helps CTP printers provide digital blueprints to customers in an entirely electronic environment. It also acts as a quality assurance tool that will facilitate validation of imposed file content, quality, position, etc., without the cost and time associated with imaging aluminum plates.
Sumo Luxel F9000 Imagesetter

Fuji Photo Film USA, Inc.

This unique multi-laser internal drum imagesetter can output 58 eight-up flats per hour at 1219 dpi with three lasers. With dual in-line supply cassettes, Sumo supports 22-in. to 44.5-in. film, in 4-mil and 7-mil format, and a maximum imaging area of 44.1x36.6 in.

Fujifilm’s patented Acousto-Optical-Deflectors are used to align and calibrate the laser beams. By continuously varying the exact angle at which the beams hit the 30,000-rpm spinner mirror, the twisting effect is compensated and three parallel lines are written per revolution providing superior image quality at incredible speed.

Sumo is available in one-, two-, and three-laser configurations. Expanding businesses can add more lasers with a simple four-hour field upgrade. This gives commercial printers, in-house printers, and service bureaus a unique upgrade path that will maintain their competitive edge and profitability without the need for a large investment or retraining on new equipment.

SpectroEye™

GretagMacbeth™

This handheld, portable spectrophotometer offers all the colorimetric functions needed to accurately measure and control special colors along with all the densitometric functions needed to quickly and easily monitor and control color on press.

It combines exceptional measurement accuracy with a host of features that provide a new level of ease of use and ergonomics. Some of the key features are a built-in white reference tile and spectral reference element, a large graphical display with scrollable menus and Windows®-like toolbar buttons with balloon help, a unique track-wheel that provides a single button for navigating menus, and an Ethernet interface.

Until now, the two biggest barriers to adopting spectrophotometry in the pressroom have been ease of use and price. SpectroEye addresses both. Press operators can quickly master the SpectroEye and translate the data they receive into adjustments to the press. In addition, SpectroEye is the only portable instrument to provide full spectral data in its affordable price range.
CP 2000 Control Console

Heidelberger Druckmaschinen AG

The CP 2000 Control Console is a new control console for central, simplified operation of Speedmaster SM 102 and CD 102 sheetfed offset printing presses. The CP 2000 Control Console is operated using an ergonomic graphical user interface. The height and inclination of the color touch screen display are adjustable. Its touch screen operation enables fast, direct feedback on executed press functions. There is a host of integrated functions, including pre-setting of all important press parameters, the ability to store up to 250 jobs, and the Colour Fast Solution Package, all of which are designed to boost productivity while optimizing the reliability of the printing process. It modular design allows it to be extended as required to meet individual requirements such as implementing digital workflows.

The CP 2000 Control Console enables faster, easier operation of the press, thus making a major contribution of boosting productivity.

Exatrionic Duo Plus with Advanced Powder Spray System

Heidelberger Druckmaschinen AG

This new system sprays both the underside, as well as the topside, of the sheet. Powder is sprayed directly onto the sheet through Teflon-coated nozzles embedded in the delivery guide plate. Antisetoff powder is applied to sheets more efficiently and evenly due to the reduced distance to the printed sheet. This also reduces powder whirling and soiling in the delivery, and spray powder can be reduced by up to 30 percent.

Linked on-line with the control console, the Exatrionic Duo Plus device controls the percentage of powder that is sprayed onto the top and underside of the sheet. Printers can select the total amount of required power in the Preset menu. Automatic speed compensation allows the amount of powder to be increased or decreased based on selected press speeds. This new powder application for both sides makes it possible to run higher piles in the delivery.
ColorBlind Matchbox
Imaging Technologies Corporation

ColorBlind Matchbox is a complete, all-in-one ICC-compatible color matching system. It includes software for creating and editing ICC profiles, a Pantone-certified utility for matching spot colors, and a colorimeter for creating profiles and measuring spot colors. With Matchbox, color professionals and content creators can create profiles for any scanner, digital camera, monitor, or printer using the same technology as the company's award-winning ColorBlind Professional ICC profiler. The package also includes ColorBlind Edit, the original profile fine-tuning application.

Matchbox shares many of the same features as the company’s professional application, as well as a reflective colorimeter from Color Savvy Systems, making it the best value on the market. Content creators, service bureaus, and print-on-demand shops can all take advantage of this extremely affordable system to implement a color management system with superior tools and accurate results.

ColorBlind Prove it!
Imaging Technologies Corporation

This network-capable monitor calibration application can be used with or without an instrument via visual adjustments. It also can be purchased with or without its own colorimeter, and it can work with most other monitor instruments.

In visual mode, Prove it allows the user to chose between “Expert” and “Easy” calibration. The visual tools allow the user to adjust gamma, gray balance, and color balance in highlight, midtones, and shadows after making a few hardware-based adjustments such as brightness and contrast.

When using it with a measuring instrument, the user can set a target color temperature and gamma, and calibrate with just a few simple steps. Using its network matching feature, an administrator can easily match all of the monitors in an entire workgroup—from one workstation. Once the monitors are calibrated to the same white point and gamma setting, the administrator sets all the monitors to a common luminance across the network.
Imation™ Color Fidelity Module (CFM)

Imation Corporation

The Imation Color Fidelity Module (CFM) for Apple ColorSync® is a revolutionary color management module. Installed as a “plug-in” to ColorSync, CFM provides the critical gamut-mapping functionality between two color spaces or ICC device profiles. CFM creates the color translation that allows one device (e.g., RGB monitor) to simulate the color of another (e.g., Imation Matchprint™ proof or specific CMYK offset press). Limitations in existing technologies to accurately preserve the black color channel information can limit the use/acceptance of an ICC-compliant CMYK workflow. What’s more, special control panels and logging features in the software provide “on the fly” UCR and GCR fine-tuning and troubleshooting options—another first for ColorSync users.

CFM’s “smart” technology “understands” the unique color of different devices and optimizes the technologies’ gamut-mapping accordingly in RGB and CMYK workflows. By installing and selecting the Imation Color Fidelity, designers and prepress and printing professionals can consistently map and emulate accurate color throughout the workflows.

Kodak Approval XP Digital Color Proofing System

Kodak Polychrome Graphics

This halftone digital color proofing system can produce up to 16 high-quality proofs per hour. Utilizing colorants that are designed to match the spectral characteristics of printing inks, it also allows density to be adjusted for the best match to press conditions.

Available in two sizes, (4 page—530×676mm and a page—530×338mm), the system is also available with an output resolution of either 2540 lpi or 2400 lpi. The open front-end architecture makes it easy for other RIP manufacturers to integrate the imager into their workflows.

The unique fully automated roll-fed system can run unattended. The intelligent media indicates how many proofs remain on any roll; that the media was loaded correctly; that the correct color donor is in the correct location on the dispenser; and how many proofs are on a roll of partially used media. The closed-cabinet imager with HEPA-filtered air inside provides cleaner, virtually artifact-free proofs.
1999 InterTech

Kodak DryView Recording Film

Kodak Polychrome Graphics

This recording film provides high-quality imaging using dry, heat-developed film. DryView is a hard-dot, negative-acting, infrared-sensitive, heat-developed film. It uses a heat-stable 4-mil polyester base for dimensional stability. It is sensitive to 25–30 mW infrared lasers and is compatible with a number of enabled imagesetters. It offers a Dmax of over 5.0 and a dynamic range comparable to wet processing systems.

DryView film can be imaged on a number of imagesetters. Most DryView-capable imagesetters can also image standard wet film and RC paper. However, the dry and compact nature of the technology expands the workflow locations where separation films may be made. Its dry processing ensures consistency from sheet to sheet, reduces processing time, decreases time spent meeting regulatory demands, allows for flexible siting, and has extremely low operating costs. DryView is a viable and attractive alternative for companies in areas with heightened environmental regulations or workspace restrictions.

---

Fusion DFE™

Litbo Development & Research (LDR)

Fusion DFE™ is a unique prepress workflow product that provides totally integrated file-serving, OPI, printing, ripping, ICC color management, trapping, screening, and concurrent direct output to a wide variety of color proofers, imagesetters, and platesetters. Best-of-class software and truly scalable SMP (symmetric multi-processing) capable hardware have been integrated and optimized with a focus on meeting the productivity demands of even the highest volume prepress shop or printer.

Fusion DFE also allows prepress shops and printers to offer unique Internet/Web-based services to their customers, allowing for secure transfers of information and data, as well as remote soft proofing and data management. This enables faster correction cycles, increased reliability, and reduced materials and labor costs.

Fusion DFE fulfills the vision of computer-integrated manufacturing for CTP: flexibility, scalability, dependability, consistency, and productivity. Fusion DFE has what it takes to meet the demands of a totally digital CTP workflow.
Auto-Count® 1000/3000

Logic Associates, Inc.

The Auto-Count® 1000/3000 data collection system takes advantage of "single wire" connectivity and DMI® technology to collect and display machine counts and stops automatically and in real-time both on the shop floor and in the front office. Auto-Count connects automatic and continuously sending sensors from web and sheetfed presses, folders, stitchers, binders, and DocuTech machines to a sealed shop-floor workstation, using an Open DMI Protocol developed by Logic. The data generated can be used to direct and monitor workflow in the plant or, when connected to the MIS, throughout the company. The Auto-Count 3000 further employs automatic waste-weighing technology to achieve counts accurate to 0.5 percent in a web press environment and can be set to halt press runs automatically at specified counts.

Because Auto-Count operates without need of manual data entry, error is reduced, plant personnel can concentrate on machine operation, and management receives a running overview of production.

Roland 900

MAN Roland, Inc.

Introduced at DRUPA 1995, MAN Roland's 13,000-sph, large-format Roland 900 press brings an entirely new level of print sophistication and production efficiency to the high-quality color package and commercial printing markets. It offers both fast makeready and versatility of high-performance package printing.

The Roland 900 is available in 44-, 50-, and 55-in. standard sheet sizes, and in 51- and 56-in. oversize formats, in press configurations of up to eight printing units, with an optional coating module and extended delivery.

The Roland 900 incorporates the same 1994 GATF InterTech Technology Award winning fiber optic PECOM press center, which directs all press functions. PECOM technology is also standard in the 23×29-in. Roland 300 and the 29×41-in. Roland 700 presses.
Asura®/Solvero®
One Vision, Inc.

OneVision's Asura and Solvero software systems make preflighting, repairing, and changing files a breeze. A fully automated correction and optimization tool, Asura works in the background, preflighting digital files and ensuring data integrity before the files enter the workflow. Using an integrated Display PostScript RIP, Asura opens and inspects each file, and fixes most errors. Asura also provides a log listing all checked files and found errors.

Solvero lets the user change virtually every aspect of a file—text, images, and graphics—on the fly. An object-oriented, platform-independent tool, it opens any PostScript, EPS, or PDF file without having access to the original application. With Solvero, users can correct file errors in PostScript, EPS, PDF, or Illustrator in one application environment. Additionally, Solvero's powerful color correction tools let users change colors on specific elements or entire documents, including separating spot colors to four-color process.

PANTONE® Hexachrome
Pantone, Inc.

PANTONE Hexachrome is an ultrahigh-quality printing process developed by Pantone, Inc. to provide dramatically improved color range and accuracy over four-color process printing with one pass on a six-color press.

In addition to reproducing more brilliant continuous-tone images, Hexachrome is capable of accurately reproducing over 99 percent of the PANTONE MATCHING SYSTEM Colors, almost twice the number that can be achieved using conventional four-color process printing. The result is vivid, real-world imagery with improved tonal reproduction, richer colors, more realistic flesh tones, sharper shad-
The Portalis System

Portalis, Ltd.

The Portalis system is a breakthrough concept in print production that turns copy jobs into print jobs by creating a high-quality digital replica of hard copy originals within minutes for printing on digital presses from Agfa, Heidelberg, IBM, Indigo, Xeikon, and Xerox.

The fully integrated Portalis system combines the simplicity of a color copier with advanced scanning, color management, and other technologies in an attractive and easy-to-use design featuring a touch-screen operator display. Portalis's unique print replication technology for the first time allows any printed material to be automatically reproduced onto virtually any substrate, with or without changes, and in a very short time.

By filling a sizable and currently unserved gap in the market for color reproductions that look and feel like the professionally printed original, the Portalis system lets digital printers provide a wider range of services to their customers while boosting the utilization of their digital presses.

RenderView™ and Pixels On Demand®

RTimage Ltd. and Scitex America Corporation

RenderView is an interactive service that allows all participants in the print process to view, proof, and render images over the Internet. It enables input from all stakeholders (e.g., graphic designer, ad executive, printer, etc.) simultaneously in real-time.

Independent of bandwidth, RenderView allows clients to work with original files instantly using standard Internet dial-up connections on their PC or Macintosh computers, thus files are accessible 24 hours a day via individual passwords for security. Being able to view a 100-megabyte file over a standard low-bandwidth Internet connection in seconds, RenderView handles all industry-standard production files without conversion or compressions and supports ICC-based color matching methods.

By allowing a working dialog among all involved through the image on screen, RenderView allows companies to work without geographic barriers and eliminates courier services. It dramatically improves turnaround times, reduces errors and their associated cost, reduces shipping and material costs, and increases customer satisfaction.
Brisque Impose

*Scitex America Corporation*

A digital imposition solution, Brisque Impose is a one of four digital front ends (DFEs) for output devices within the Scitex Brisque software family. This family functions as a complete press center. The Brisque Impose eliminates the bottleneck of having to wait for all pages to arrive before starting a job since each page is processed separately. Post-RIP editing is fast and easy. Last-minute corrections and re-RIPing an individual page or partial pages saves hours. Press-related settings, such as screening, dot gain compensation, and imposition, are performed at a very late stage, making last-minute press decisions possible. Additionally, the RIPed data is device-independent; the same data is used for all output destinations. These features enhance the chance that the customers' expectations are met more often.

Its unique, page-independent, RIP-once workflow maximizes efficiency and flexibility and eases handling and corrections. The Brisque Impose can substantially save time by increasing throughput and achieving greater print predictability.

Lotem 800V

*Scitex America Corporation*

The Lotem 800V is a fully automated, external-drum, thermal imaging platesetter. Within the footprint of a typical eight-page imagesetter, Lotem 800V provides full automation including slip sheet removal, customized multi-head plate punching, and load/unload transport of plates. The Lotem 800V platesetter supports any size plate from 25.6x21.7 in. to 44.5x35.4 in., and continuously variable resolution from 1524 to 3556 dpi. Multiple infrared beams are calibrated in less than two seconds before each exposure sequence, assuring total uniformity throughout the exposure and consistent high performance. The automatic punch provides precise registration and faster fit on press, thereby reducing makeready time. The image is placed relative to the punches that will be used on press, for maximum accuracy.

This high-quality, high-throughput fully automated platesetter, with an external-drum device with in-line punching, requires no operators for continuous use.
SeeColor ROSETTE™ RIPs with HP DesignJet CP Series Printers

SeeColor Corporation & Hewlett Packard Company

SeeColor RIPs team with HP DesignJet printers to generate cost-effective, color-accurate larger format proofs. These technologies create a digital proofing system designed for newspapers, CTP installations, and commercial printers running wide sheetfed presses.

HP inkjet printers are recognized for excellence in quality and ease of use, features required for reliable proofing. SeeColor RIP software tools are used to match press dot gain, ink hue pollution, and ink film thickness on either newsprint or specific inkjet papers. Proofs are made with stochastic screening or SeeColor's patented halftone screening at 85, 100, 110, 120, or 133 lpi.

SeeColor's PostScript workflow allows designers to proof PostScript or PDF files from their network. In a "Post-RIPed" workflow, pre-separated, one-bit TIFF files are sent from an imagesetter or platesetter RIP, recombined, and then color matched to press. A pre-screened file's underlying halftones are reproduced on the HP DesignJet printer.

Green Machine 13000

Therm-O-Type® Corporation

THERM-O-TYPE Green Machine models are the most energy efficient high-production thermography machines ever manufactured. During actual testing in wholesale thermography plants, the Green Machine 13000 using a 13-kilowatt heater equipped with insulated heater doors consumed 7.3 to 8.7 kilowatts per hour during operation. This is a 33 to 44 percent decrease in direct power consumption that also drastically reduces excess heat loss into the shop. Heat-up time has been reduced to less than eight minutes, and the Green machine is exceptionally quiet.

Savings in direct electrical power consumption, air conditioning cost, increased productivity, and faster start-up time represent thousands of dollars each year in increased profits for wholesale thermography businesses.

Unique Green Machine features are protected by the United States Patent Office and have been proven in hundreds of installations around the world since 1994.
The Ultimate On-Q Server

ULTIMATE Technographics, Inc.

The Ultimate On-Q Server is the automated PostScript and PDF workflow solution for prepress and printing professionals. This ICC color-managed workflow is based on virtual print queues. Users can create an unlimited amount of print queues on the server and added preferences for trapping, OPI print management, and imposition. These sophisticated print management features, combined with load balancing, ensure that imagesetters and platesetters are always outputting to capacity.

Designed to be a simple workflow solution, the On-Q is a non-proprietary prepress solution for professionals who need to integrate a workflow solution into their shop. While some other workflow solutions necessitate costly purchases to replace most of the hardware in a shop, the On-Q Server easily integrates into an existing server and output device setup. The complete workflow can be installed on any Mac or NT server in a matter of minutes.

Digital Graphics Network

Vio North America

Created to meet the production demands of the global publishing, printing, and graphic arts industries, this network gives users total control of high-speed file transfer. Its features include priority file management, on-line job tracking, flexible job ticketing, and multi-site distribution from a single send via T1, ISDN and a managed Internet gateway.

The Vio service relies on standard TCP/IP protocols and a centrally managed server that users access through a standard web browser interface. The central server model avoids the installation of expensive computer hardware at user sites and allows users to receive files when and where they are needed.

Vio also offers access to advanced workflow applications, including many features and tools developed to streamline and manage workflows more efficiently throughout the various stages of production. These applications include Vio RemoteProof for color-managed hard proofing, RenderView for real-time soft proofing, and a new wide-area digital media asset management service.
ACME Plate Reader

The Wyndam Group

The ACME Plate Reader is the first hand-held plate reader capable of accurately and reliably measuring virtually any type or color of printing plate, even providing readings for computer-to-plate printing. Until now most printers have relied upon a visual assessment to check dot values or unsuccess fully used densitometers to calibrate printing plates. The ACME allows for computer-to-plate systems to be quality-controlled before the plates are mounted on the press—one step closer to the end product. The ACME uses patented technology to photograph the emulsion background and target area of the printing plate. From these measurements, a dot percentage is calculated to within one percent of the actual value.

The ACME Plate Reader reduces plate “remakes” and saves many printers an average of 1.5 hours of press downtime per day. Additionally, it allows prepress departments to communicate accurate information to plate manufacturers, the pressroom, the designers, and the customers.

500 Series Reflection Spectrodensitometers

X-Rite, Inc.

X-Rite’s 500 Series of hand-held spectro densitometers use spectral technology to deliver unmatched performance in monitoring process color and color measurement data in five affordable models. This is the first full line of portable instruments equipped with spectral engines, allowing precise densitometric, colorimetric, and spectrophotometric measurements depending on the model. All 500s feature large graphic displays, support multiple languages, and are simple to use.

The entry-level 504 or 508 are best for density measurements, the 518 for a full-function densitometer, and the advanced 528 or 530 for controlling special color, paper evaluation, ink formulation, and color management. The large, crisp graphic display can be configured for left- or right-hand operation and allows menu options to be displayed in a variety of languages. A new intuitive keypad and navigation system feature simple, universally understood function keys.

The X-Rite 500 Series spectro densitometers bring unsurpassed color management control to the pressroom.
DTP41/T AutoScan Spectrophotometer

X-Rite, Inc.

Providing single-button operation and automation for fast and accurate results, the DTP41/T is a unique autoscan spectrophotometer that reads reflective and transmissive media. It assures consistent data measurement of printing and proofing systems and is ideal for measuring large-format back-lit media, or for measurement of photographic transparency media.

Measuring 480 color patches in less than five minutes, the DTP41/T saves time in creating profiles and eliminates errors associated with manual reading. By connecting the DTP41 to a computer, printing a test image from virtually any third-party color management or calibration software, and scanning the test sheet with the DTP41, printers can maintain consistent, accurate color levels from day to day.

An UV version incorporates an ultraviolet filter to minimize the effect of fluorescing brighteners and whiteners used in some reflective media. A W9 version includes an expanded throat depth that enables the measurement of color patches up to 9 inches from the media page.
1999 InterTech

PREVIOUS AWARD WINNERS

1998
- Chromapress IntelliStream™ with Personalizer-X™
- AFX 410 Storage Server System
- euRIPides Digital Prepress Workflow
- Peerless KemFuire™ Lithographic Printing Plate
- PolaProof™ Digital Halftone Proofing System
- PrintLink
- CPC 32 Prepress Interface
- InkPRO

1997
- Cyrel® Digital Imaging System
- Renaissance Scanning System
- IMPRESS™
- FMR
- DeltaTechnology
- CrackeraJack™
- DemandStream® 8080DI 500 iPM Printer
- Dry Tech Thermal Film
- Fiber Laser for Thermal Imaging Applications
- PEARLgold™ Lithographic Plate
- WAMINET™ Digital Delivery Network

1996
- Bourg® Binder BB2005
- Creo THERMAL Laser Head
- Kodak Direct Image Thermal Printing Plate
- ColorQuick
- E-Print® 1000 Digital Offset Color Printing Press
- DPM 2000-Digital PlateMaster
- Oscillating Web Cleaner
- PEARL® Ablative, Thermal Lithographic Plates & PEARLsetter™ Series 52, 74, and Plus
- Customer Service Toolbox®/MagPRO® for Windows
- Sheetfed Offset Training Simulator (SHOTS)

1995
- Adobe Color Central® OPI and Print Server Software
- Baldwin IMPACT™ Automatic Blanket Cleaner and Press Cylinder Cleaner
- COLOTRON® Digital Color Sensor
- Heidelberg Computer-to-Press Digital Imaging Technology
- TechNova NovaDom® Computer-to-Press System
- 3M Rainbou™ Desktop Color Proofing System
- Xeikon DCP-1 Digital Color Press

1994
- Agfa CristalRasier
- Creo Computer-to-Plate System
- Polycbrome CTX System
- MAN Roland 700 Press
- Heidelberg Harris Sunday Press Technology

1993
- Aqua Dynamics Dampering Enhancement System
- Bötcher FEBO® Glaze-Free™ Steady Set™ Printing Rollers
- Xerox DocuTech Publishing Series
- Kodak APPROVAL Digital Color System
- Komori Fully Automatic Plate Changing System (APC)

1992
- Gerber Direct-to-Plate LE55 Laser Imager
- Graphic Systems Specialties, R-C-F™ Fountain Solution
- Hoechst Celanese, Ozasol® N90™ Digital Laser Plate
- Linotype-Hell Company, RIP 60 with L.S. Technology
- Polycbrome Waterless Lithographic Printing System

1991
- Adobe Photoshop™
- Baldwin Stobb VSB-5 Automated Vertical Stacker/Bundler
- Heidelberg Speedmaster CP Tronic
- PTC Tempest Hot-Air Drying System
- TRUMATCH
- X-Rite 938 SpectroDensitometer with SpectroStart software

1990
- LeapFrog® Technologies, DUST BUNNY™ magnetic wiping fabric
- PANTONE® Color Toolkit
- Printware 1440 Platesetter
- Oxy-Dry Model BMW Automatic Blanket Washer

1989
- Bright Light Films w/X-STAT™
- 4CAST™ Digital Color Imager
- "Foam-Free" Circulator and Foam Eliminator Kit
- HV High-Velocity Hot-Air Drying System and Plate/Blanket Coater
- In-Line Former™
- Lightspeed™ Color Layout System
1999 InterTech

PREVIOUS AWARD WINNERS

1988
• Baldwin Automated Newspaper Blanket Cleaner
• Cosar AutoSmart Densitometer
• Du Pont OptiSafe Optical Archiving System
• Kodak Signature Color Proofing System
• Special Award: Dr. S. Thomas Dunn and the Vendor Technical Committee of the Image Technology Committee

1987
• Du Pont Print Manager
• Gazarti GA-C.A.T. Graphic Arts Comprehensive Abrasion Tester
• Hall Chromacom Proof Recorder 403
• Iris Color Ink Jet Printer
• Web Printing Controls MicroTrak CCR Closed-Loop Automatic Register Control System

1986
• Crosfield Data Compression/Satellite Transmission System
• Ekornes Designmaster 8000 Flatbed Scanner
• 3M Viking Lithographic Plates

1985
• 3M Onyx Cut-Film/Plate Material
• Eastman Kodak Ultratec Products
• Polychrome Corp., Laser-Scan Printing Plate
• Printing Research, Inc., "Mark-Less" Super Blue System

1984
• Automation, Inc., Auto-Count Waste Reduction System
• Crosfield Magnascn 640 Scanner
• Doubtott Option "X" Vacuum Frame
• George Hantisco Sabre Cylinders
• IBM 4250 Electro-Erosion Typesetter-Printer
• Quad/Tech RGS III Closed-Loop Register System

1983
• Baldwin Automatic Blanket Cleaner
• Coulter Systems KC-Gravure Color Proofing
• Crosfield Lasergravure System 700
• Stretch Devices, Inc., Newman Roller Frame
• Rachwal Super 70 Projection Platemaker
• System Brunner

1982
• Gerber AutoPrep 5000
• Monotype Lasercomp Mark 2
• Butler Datamat Microprocessor-Controlled Splicer
• Hantscho Microregister Control
• Armagraph Microprocessor-Controlled Splicer

1981
• Harris Prefax System
• HurletronAltair Press Management System 700
• Mergenthaler Omnitex/2000
• Hazeltine Separation Previewer

1980
• Crosfield Magnascn 570
• Hall Chromacom
• Triple-III Automated Illustrated Documentation System
• Scitex Response 300
• AIM International Electronic Ink and Moisture System
• Heidelberg CPC I and CPC II
• Roland Offset/Mieble CCI

1979
• Xerox 9700
• Harris Telecolor
• Opti-Copy Imposer
• Royal Zenith Dieboard Cutter

1978
• Hell Chromashop
• Multimex Assembler
• Log-E-Scan
• EOCOM Laserite
• Kollmorgen On-Press Monitor
• Chroma-lite Photopolymer Film
• Digiform Photocomposition System

To nominate a product/technology for the 2000 GATF InterTech Technology Awards
please contact
Richard D. Warner, GATF Vice President and Director of Research, by phone at 412/741-6860, ext. 581 or by fax at 412/741-2311.

1999 GATF InterTech Award Booklets
Individual copies of the 1999 GATF InterTech Technology Award booklets (GATF catalog no. 529599) are available for $10 ($8 GATF/PIA members). Quantity discounts are also available. For more information or to place an order, contact GATF at:
GATF Orders
P.O. Box 1020
Sewickley, PA 15143-1020
Phone (U.S. and Canada only): 800-662-3916
Phone (all other countries): 412/741-5733
Fax: 412/741-0609
Email: gatforders@abdnatl.com
Directory of Companies with Products Represented in this Book

Agfa Corporation
200 Ballardale Street
Wilmington, MA 01887-1069
978/658-0200

Agfa-Gevaert NV
Sepsstraat 27
Morsel, Belgium B-2640
32 3 444-2111

BARCO Graphics, Inc.
721 Crossroads Court
Vandalia, OH 45377
937/454-1721

Bitstream, Inc.
215 First Street
Cambridge, MA 02142
800/551-0549

Citiplate, Inc.
275 Warner Avenue
Roslyn Heights, NY 11577
516/484-2000

Color Swaby Systems Limited
305 South Main Street
Springboro, OH 45066
513/748-9150

Creo Products, Inc.
3700 Gilmore Way
Burnaby, BC V5G 4M1, Canada
604/451-2700

Croda Adhesives, Inc.
100 Hollywood Avenue
Itasca, IL 60143
800/878-5623

DuPont Color Proofing
Barley Mill Plaza EBP30-2168
Wilmington, DE 19880-0030
302/992-4738

Fuji Photo Film USA, Inc.
1285 Hamilton Parkway
Itasca, IL 60143
630/773-7200

Grafex North America, Inc.
8350 South Madison Street
Burr Ridge, IL 60521
800/325-2850

GretagMacbeth™
617 Little Britain Road
New Windsor, NY 12553-6148
800/622-2384

Heidelberg Druckmaschinen AG
Kurfürsten-Anlage 52-60
69115 Heidelberg, Germany
49 6221 92 7030

Heidelberg USA, Inc.
1000 Guinevere Drive
Kennesaw, GA 30144
770/419-6500

Heidelberg Web Systems
121 Broadway
Dover, NH 03820-3290
603/749-6600

Heulett Packard Company
Atalaya Graza 9501
0819 Sant Cugat del Valles
Barcelona Spain
34 352 1300

Imaging Technologies Corporation
15175 Innovation Drive
San Diego, CA 92128
858/613-1300

Imation Corporation
Printing and Proofing Products
One Imation Place
Oakdale, MN 55128-3414
651/328-1303

Kodak Polychrome Graphics
401 Merritt 7, 3rd Floor
Norwalk, CT 06851
203/845-7000

Litho Development & Research (LDR)
12021 NE Airport Way
Portland, OR 97220
503/255-5800

Logic Associates, Inc.
221 Christian Street, PO Box 765
White River Junction, VT 05001-0765
802/505-6442

MAN Roland, Inc.
800 East Oak Hill Drive
Westmont, IL 60559
630/929-2000

Markware Software, Inc.
1805 East Dyer Road, Suite 101
Santa Ana, CA 92705
949/756-5100

Max Daetwyler Corp. (MDC)
13420 Reese Boulevard West
Huntersville, NC 28078
704/875-1200

One Vision, Inc.
438 Division Street
Sewickley, PA 15143
412/741-4811

Pantone, Inc.
590 Commerce Boulevard
Carlstadt, NJ 07072-3098
201/935-5500

Phase One
24 Woodbine Avenue
Northport, NY 11768
516/757-0400

Portalis, Ltd.
151 West Passaic Street
Rochelle Park, NJ 07662
201/909-3777

QuadTech, Inc. (QTI)
N64 W23110 Main Street
Sussex, WI 53089-5301
414/246-7500

RITmage Ltd.
1660 South Amplett Boulevarad
San Mateo, CA 94402
650/655-7201

Scitex America Corporation
8 Oak Park Drive
Bedford, MA 01730
781/275-5150

SeeColor Corporation
2407 East Charleston
Mountain View, CA 94043
650/237-2250

Tether-O-Type® Corporation
PO Box 998
Nokomis, FL 32474-0998
800/237-9630

T/R Systems, Inc.
1300 Oakbrook Drive
Norcross, GA 30093
770/448-9008

ULTIMATE Tecnographics, Inc.
1990 Sherbrooke Street, West, Suite 800
Montreal, QC H3H 1E7, Canada
514/938-9050

Vio North America
500 North Gulph Road, Suite 220
King of Prussia, PA 19406
610/992-5788

The Wyndham Group
487 Esther Street
Costa Mesa, CA 92627
949/450-3404

X-Rite, Inc.
3100 44th Street, SW
Grandville, MI 49418
616/534-7663

Printed on Utopia One Blue White Gloss
100 lb. Cover and 100 lb. Text
Paper provided by Appleton Papers.
UTOPIA® is a trademark of Appleton Papers, Inc.