

# Computer-to-Plate: Automating the Printing Industry



by Dr. Richard M. Adams II  
and Frank Romano

**GATF**  
Graphic Arts  
Technical Foundation



Copyright 1996  
Graphic Arts Technical Foundation  
All Rights Reserved

Library of Congress Card Catalog Number: 96-78325  
International Standard Book Number: 0-88362-191-6

Printed in the United States of America

Order No. 1435

Reproduction in any form by any means without specific written permission is prohibited.

Individual trademarks are the property of their respective owners. Product names are mentioned in this book as a matter of information only and do not imply endorsement by the Graphic Arts Technical Foundation

Graphic Arts Technical Foundation  
4615 Forbes Avenue  
Pittsburgh, PA 15213-3796  
United States of America  
Phone: 412/621-6941  
Fax: 412/621-3049



## 2 COMPUTER-TO-PLATE: AUTOMATING THE PRINTING INDUSTRY

advertising industry universally supports digital delivery of ad material. Having worked with *Scientific American*, we can all see how this process can save time in the future."

*Scientific American* has been committed to the regular use of CTP technology since October 1994, publishing more than 60 million printed pages to date with the Mattoon, Ill. division of printer R.R. Donnelley & Sons Co.

"Computer-to-plate printing for the web-offset process is a promising technology for the publishing industry," said Bob Pyzdrowski, president of magazine services for R.R. Donnelley. "This new technology that we've implemented for *Scientific American* benefits publishers, printers, and advertisers alike with time-savings, efficiency, and quality."

"As this new technology evolves, we face many challenges. Standards must be put firmly in place. Industry organizations such as Specifications for Web Offset Publications (SWOP) need to implement specifications for transporting digital data and proofing," said Sasso. "We've proven the technology works. Now all parties should work together to develop and embrace the techniques that will improve magazine publishing."

Anyone who has been reading the trade press over the past two years, or has attended the most recent trade exhibitions, will be aware of the enormous interest in CTP. Potentially, investing in CTP can provide the following benefits:

- Savings in supplies—film, carrier sheets, film chemicals, tapes, and adhesives
- Savings in personnel—stripping, film exposure, retouching, and processing
- Savings in equipment—film exposure, film processing, and processing
- Savings in space of up to 50%

And so, a market with roots back almost 20 years begins to have an impact on the printing and publishing industries.

### Computer-to-Plate Printing Systems

The trend in printing is toward shorter run lengths, which means changing plates more often. CTP seems to be the primary method for conventional lithography to cope with the continuously growing demand for short-run printing and increased productivity. CTP means more than installing a plate imaging device. A CTP installation involves many additional devices and systems that enable the application of a digital workflow. New organizational and technological requirements are created (networking, storage and archiving, digital proofing, file transfer, preflighting), and it is important that each is thoroughly implemented in order for the whole system to operate efficiently. Imaging plates directly from computer files has been an approach to increased productivity in prepress and reduced makeready in the pressroom. Its time has come.

What began in the late 1980s and early 1990s as a trickle has become a river. There are more than 16 different engines sold by almost 40 firms with about 20 different plates. Some systems expose a variety of plates; some concentrate on one plate. CTP has now gone beyond confusion to a point that some consider maddening.

You can quickly categorize the systems into eight or more-up, four-up, and two-up, although some systems can handle both four-up and eight-up. Then you can categorize them by dry or wet processing. The wet processing can be water for the photopolymer plates or chemistry for the silver-based plates. Some of the dry processing requires a smidgen of water.

These two categorizations get you into a reasonable ballpark in terms of comparison. We will assume that the system can produce 8–20 plates per hour (depending on size) from the time the file is sent to the RIP until the plates exit from the system. Price tags are still above \$400,000 for eight-up

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.