

SCREEN

Trueflow SE

Automated JDF-compliant PDF workflow solution



Creating a Future in Print

Trueflow SE enhances your business by adding value into the prepress production process

Trueflow SE features the latest PDF support utilizing the reliable Adobe PDF Print Engine, provides coherent workflow automation, is JDF-compliant and produces superior print quality thanks to its unique screening technology. On top of this Trueflow SE is extremely user friendly.

Trueflow SE Features

Automated Workflow Brings You Benefit

Trueflow SE provides flexible and highly automated CtP and digital printing press production, using JDF-based Job ticket. It integrates everything from incoming job handling to prepress, proofing, and the output for CtP. It is also possible to build an

advanced process automation workflow that encompasses the entire print production workflow, from MIS to press and postpress processing.

Automation for press and postpress

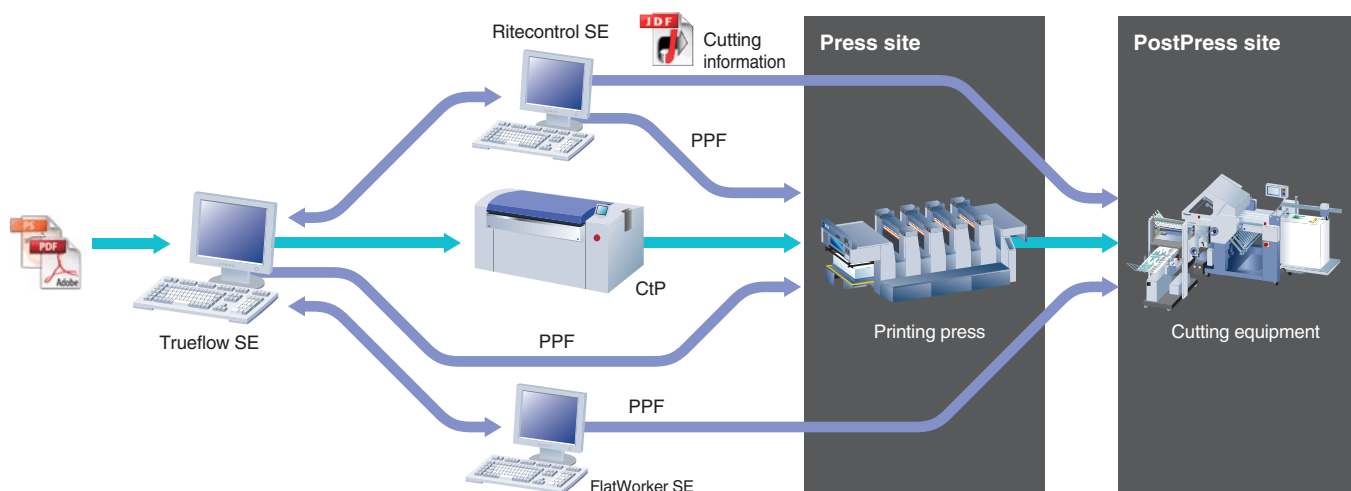
Seamless production workflow using common platform

Trueflow SE can output digital PPF files that conform to CIP3 and CIP4 standards, making it possible to set up ink key control automatically for printing presses that support PPF data. This significantly reduces the amount of reporting and manual setup tasks and increases production efficiency.

Ritecontrol SE can output and transfer ink presetting PPF data to press as well as JDF cutting information to postpress, which

eliminates intermediate tasks between each production phase, shortens the time required for device setting and promotes smooth start-up. In addition, its intelligent load balancing function maximizes processing efficiency and seamless interactions with MIS system.

The FlatWorker SE imposition application can also send the required PPF files for the postpress cutting equipment, in turn saving time and labor between the printing press and cutting equipment.

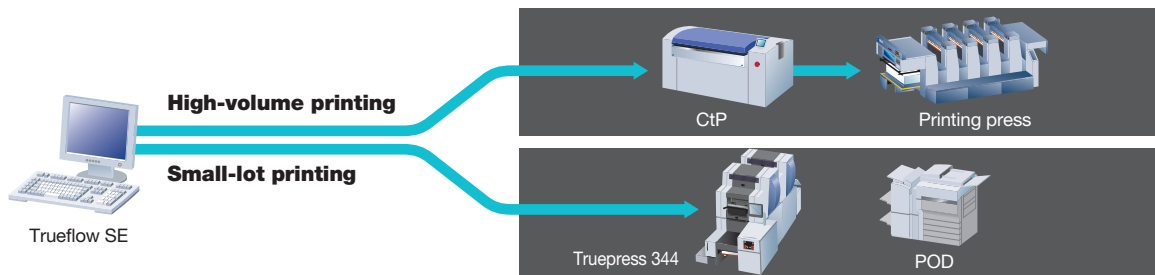


Hybrid workflow

Multiple devices connected and managed by a single Trueflow system

In a hybrid workflow, where data is sent to the appropriate device according to the number of copies required, ensuring smooth management of data just before printing is as important

as maintaining quality. With Trueflow SE, data and process management are unified under a single system, immediately before printing begins. This makes it easy to respond to changes – even last-minute changes in the number of copies required.



Working with MIS systems and supporting other vendors' imposition templates

When Trueflow is connected to the MIS, it can automatically generate Trueflow Jobs using JDF data from the production office. This ensures correct transmission of information between the various production processes, enabling a seamless and efficient workflow. Not only does this eliminate errors but it keeps the

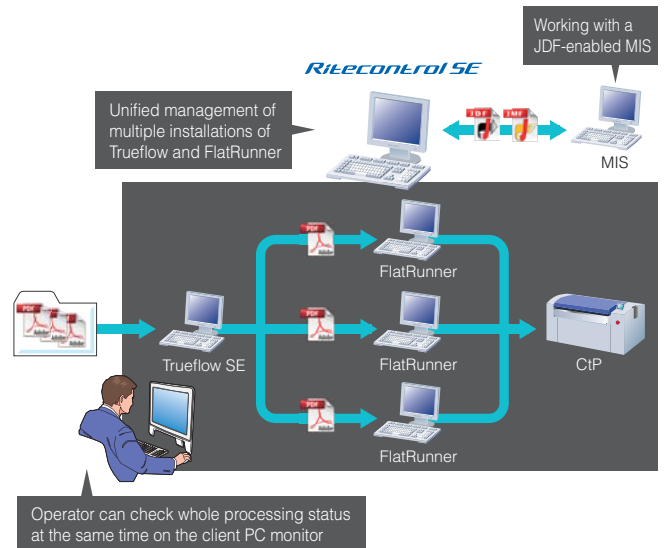
production staff up to date on the status of each job in production.

Trueflow can also import imposition templates made by other JDF-enabled applications and apply them to the job. It provides a seamless prepress environment, especially for users who want to continue using their favorite imposition application.

Automation accelerates workflow productivity

Automation is always an important element for workflow productivity, eliminating intermediate tasks and promoting cost and time savings for production flow. Furthermore, automation technology can be directly dedicated to enhancing production efficiency and a typical example is Trueflow's automated load balancing.

The Ritecontrol SE option links seamlessly with Trueflow SE under both Job Recorder and Hot Folder workflows, maximizing the overall prepress efficiency. It unifies the management of multiple installations of Trueflow and FlatRunner to optimize your system integration, and distributes the input/output processing load between different stations. It is JDF compatible and can be easily linked up with a JDF-enabled MIS and press/postpress systems. If you want a fully automated workflow, load balancing is one of the necessities worth investigating. You will see incredible enhancements of productivity.



Reliable online communication

Another benefit automation brings is definitive online communication. Verbal communication and manual approval procedures can sometimes cause mistakes. With Riteapprove SE, online automation for Trueflow SE, customers can communicate

their job requirements directly into production environments anytime, anywhere; preventing mistakes at an early stage. For more information about Riteapprove SE, please check the "End-to-end Prepress Production Solution" section.

Trueflow SE Features

Why You Should Start with Trueflow

Complete PDF/JDF workflow with an Adobe PDF Print Engine



Trueflow SE fills the gap between design and printing with an end-to-end JDF-compliant PDF workflow solution

that supports PDF/X-4 (transparency, RGB workflow) with the latest Adobe PDF Print Engine.

Outline PDF/Outline PDF-Advance

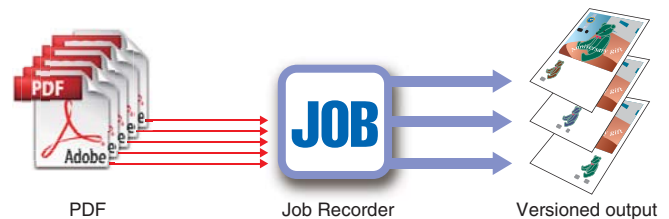
Want to get a reliable output result even under an uncertain environment? Outline PDF/Outline PDF-Advance is Trueflow's original data format that secures overall output results. With the outline data, you do not have to worry about the environment of the RIP or output devices. This reliable PDF exchange format enables outsourcing as well as multi-site operation, and is a best solution in cases where data will be output from unspecified

devices. It keeps PDF format usability and makes for quick and efficient page replacement or output of imposed PDFs.

In Outline PDF-Advance, features such as support for processing larger data files, as well as image compression are significantly improved.

Versioning

Versioning is particularly useful in the production of documents where individual portions are switched to produce customized documents for the intended market. This is a fast and efficient way to produce manuals with multiple language versions or regional advertisements. Versioning can be carried out with multiple PDF files or a single layered PDF file. Multiple versions can be created at once, with the possibility to select any version needed.



Page inspection

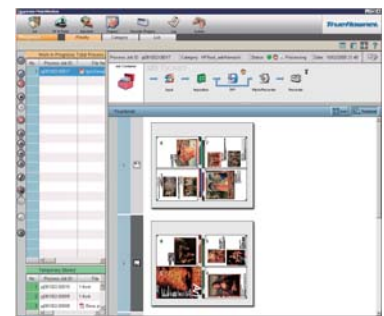
Page inspection makes it possible to check for editing errors and color specification problems before the data is imposed. Page inspection is suitable for both Job Recorder and Hot Folder

operations. For more information about page inspection, go to "End-to-end Prepress Production Solution" page.

User friendly visual interface and real time job monitoring

Trueflow features a user friendly interface to create multiple different workflows. All you have to do is just drag and drop its graphical icons and make your desired processing flow. Once a workflow has been created, a JDF-based Job ticket will carry out multiple tasks for any particular job. Operators can check the settings for each process by clicking on the icons, which makes it easy to see what settings have been made for each process in each job. Even once the job has started, progress can be monitored

in real time with both Windows and Mac in a network environment.



Trueflow SE Features

How It Works

Automated custom workflows

Trueflow SE's workflow can be set up as required. For example, requesting approval if output processing is halted for any reason or sending an e-mail notification when processing

Hot Folder workflow path

A Hot Folder is easy to use; every step of the process is automated. Once it is set up, everyone can output a job on Trueflow with simple drag and drop operations.

Job Container

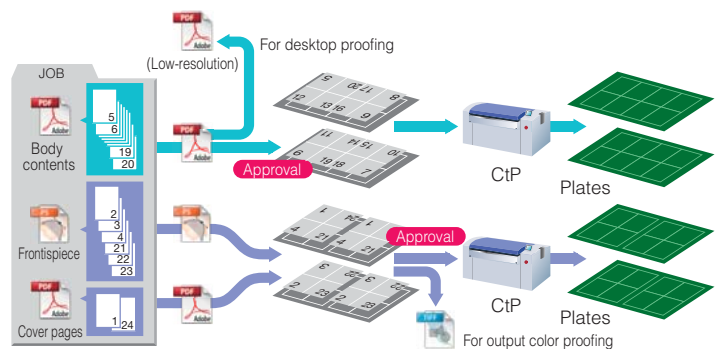
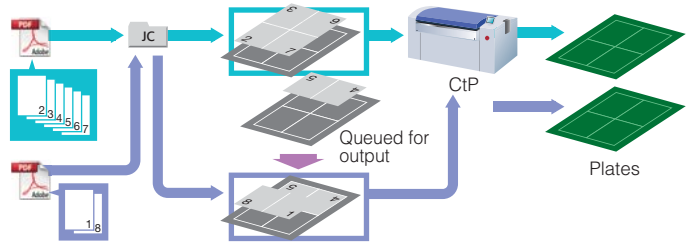
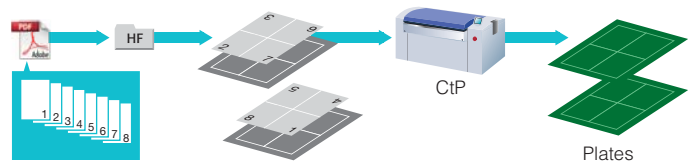
With this intelligent Job Container path, it is possible to run a job automatically by dropping in separate documents at different times. If some pages are likely to arrive late, this is probably your best choice. Every separate flat will run through the process automatically once pages are ready, resulting in a very effective production process, again all automated.

Job Recorder

The Job Recorder workflow is very flexible, can be customized for every single job and enables true last-minute changes. With this flexible workflow option, you can use separate Job ticket to process different pages in different ways. It enables last-minute page replacement without affecting the other pages, as well as last-minute change on imposition schemes. The Job Recorder workflow provides tremendous benefit to your production environment if you require last-minute press changes.

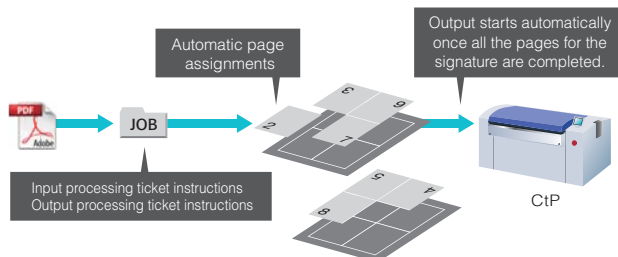
Furthermore, you can also use it for a simple automation like a Hot Folder path, or for an intelligent automation for late-binding files, as a Job Container feature.

is completed. The system offers a flexible range of operation options, such as saving of intermediate data and RIP'ed data, corrections by page, repeat output of plates and more.



Automatic processing with the Job workflow

In the Job Recorder workflow path, you can specify input and output processing tickets in advance for a job folder. Pages are assigned automatically as component data is added into the job, and output automatically starts with the first signature populated with pages. This is how an automated processing workflow can be achieved with simple settings in the Job Recorder workflow.



Trueflow SE Features

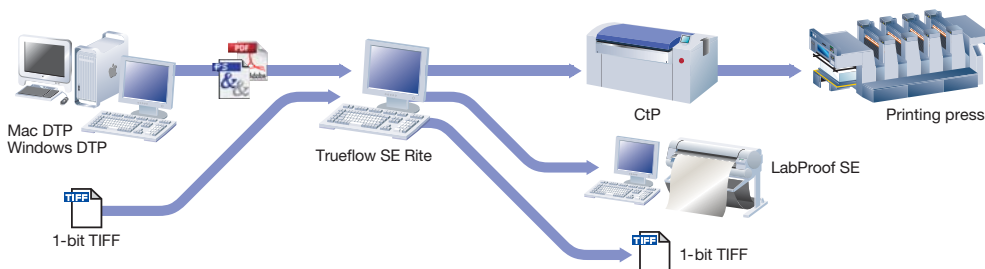
The Trueflow Family of Products

Trueflow SE Rite

All the functions you need for CtP output

Trueflow SE Rite is an entry-level workflow RIP featuring the basic Trueflow SE functions relating to CtP output. Like Trueflow SE, it boasts standard features such as TIFF output and recorder output. Advanced features such as automated trapping, imposition schemes and impositioning can be added as

options. Trueflow SE Rite can even be upgraded to the full version of Trueflow SE on-site, making it the perfect tool for a growing business. Trueflow SE Rite offers Hot Folder and Job Container workflows. Using it is easy. Operators simply drag and drop job data into the workflow Hot Folder to start CtP output.



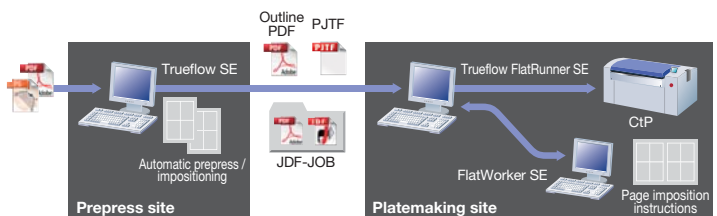
Trueflow FlatRunner SE

Increased productivity and two-site solution

Trueflow FlatRunner SE can accept Outline PDF/Outline PDF-Advance, PJTF and JDF-JOB files created by Trueflow SE or Trueflow 3 and output that data to any Screen CtP recorder.

For two-site solution, tasks can be distributed so that plate data creation and page layout are carried out by Trueflow FlatRunner SE and FlatWorker SE, while page data is handled by Trueflow SE. This reduces the load on Trueflow SE and makes it easy to carry out prepress and platemaking operations at two different sites.

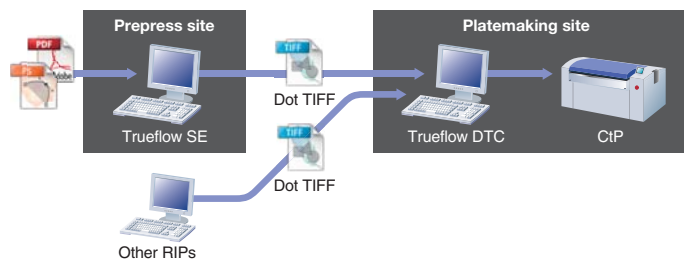
It also features load balancing solution to improve your processing efficiency. For more about this solution, please refer to "Automated Workflow" section.



Trueflow DTC

Flexible Dot TIFF controller that accelerates your productivity

Trueflow DTC is a controller designed specifically for plate output, which accepts Dot TIFF (1-bit TIFF) data created at the prepress site and outputs it to a variety of recorders, including CtP recorders. Since Trueflow DTC automatically creates the appropriate output resolution for the recorder used, it helps increase productivity even further when high-speed recorders are used. Trueflow DTC also supports Dot TIFF data created by other manufacturers' RIPs and is compatible with a wide range of RIPs and equipment.



For Higher Quality

Reliable Screening and Auto Trapping

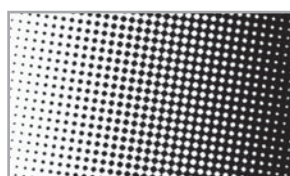
Reliable screening library

Trueflow SE supports Screen's extensive screening library, including Spekta 2 AM/FM hybrid screening, high-quality FM Randot X screening and AM high-frequency screening.

Spekta 2 is an innovative hybrid screening method that eliminates moiré and broken lines and delivers print quality and

detail comparable to that achieved with 300+ lpi high-frequency screening, all without having to make special changes to existing conventional print management facilities. Spekta 2 provides high-end print quality using standard CtP equipment.

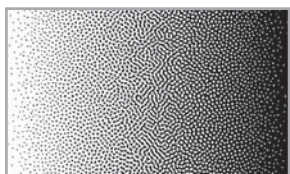
Screening line up



AM screening



Randot X FM screening



Spekta 2 Hybrid screening

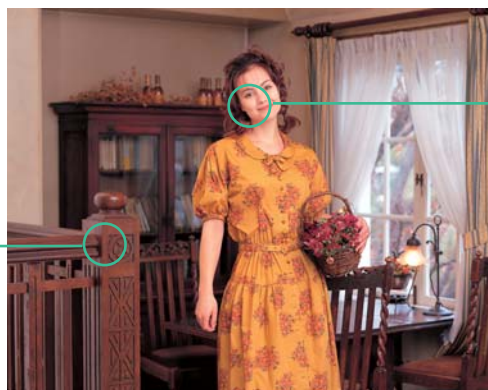
Spekta 2: Combining the strengths of AM and FM screening



175 lpi AM screening



Spekta 2 screening



175 lpi AM screening



Spekta 2 screening

Multi-screening

Multi-screening can be used on images, text, keylines, background patterns, tints, decorative lines, outlined text, gradations and more. Different types of screening can be

mixed within a single page and applied to individual objects as appropriate. This helps prevent moiré, broken lines and other problematic artifacts, while increasing overall quality.

Auto-trap and interactive trapping

Trueflow SE offers automated trapping solutions including object trapping, overprinting, spot colors, kickback and more. Files are trapped using the parameters defined in the Auto-trap template and you can preview the trapped results in advance on your screen.

Optional PDF Trapeditor software also offers interactive trapping to define more detailed settings. It is a plug-in

for Adobe Acrobat Professional, and can be used on both Windows and Mac. Operators can set instructions easily and preview results in Acrobat at the same time, manipulating traps as desired. PDF Trapeditor enables users to give individual traps and screening instructions for each object, which results in desirable quality.

For Higher Quality

RGB to CMYK Conversion

Screen's history of experience in RGB/CMYK color separations

The ability to transmit images easily and reliably while maintaining high quality is one of the biggest issues facing the printing industry. Screen's decades of prepress and high-end scanner experience have led to the creation of Colorgenius

to address these issues. It offers easy conversion of images to print-ready CMYK with a single click of the mouse, while maintaining the tone of the original image.

Colorgenius DC: Just one click from RGB to CMYK

AI setup 1 Click!

Optimized CMYK halftone dots are generated for the density range (highlights to shadows) of the original image (RGB image), so that the image's tone can be reproduced.

Keywords 1 Drag!

Subject and finish-style keywords are used to generate the desired finish. Colorgenius DC features keywords that incorporate the image correction know-how of expert prepress operators. The user can simulate color conversion as many times as needed while trying different options until the desired finish is achieved.

Sharpness AI

Colorgenius DC's sharpness AI offers automatic evaluation and optimization of the RGB image to ensure optimal sharpness for the printing of images, regardless of the type of digital camera and image capture conditions.

AI bypass function (ICC emulation mode conversion)

Colorgenius DC can also be used to combine ICC profile style conversion with fine adjustments to the image using keywords and sharpness settings. This results in an extremely high image quality.

Modification of CMYK images

Colorgenius DC can edit images submitted in CMYK format as well. The same types of operations such as Keyword settings for RGB are fully supported and can be used for CMYK images.

Improved 8-bit RGB conversion quality

Colorgenius DC now offers higher quality conversion of 8-bit RGB images such as those produced by consumer-level digital cameras and available in free image libraries. The new conversion algorithms help prevent tone jumps, and the AI setup's optimized color-cast correction ensures even higher overall quality.

• High quality, intelligent conversion of Colorgenius



Original RGB image



CMYK conversion using Colorgenius DC (Default setup)



CMYK conversion using ordinary application

For Higher Quality

RGB/PDF Workflow Solution

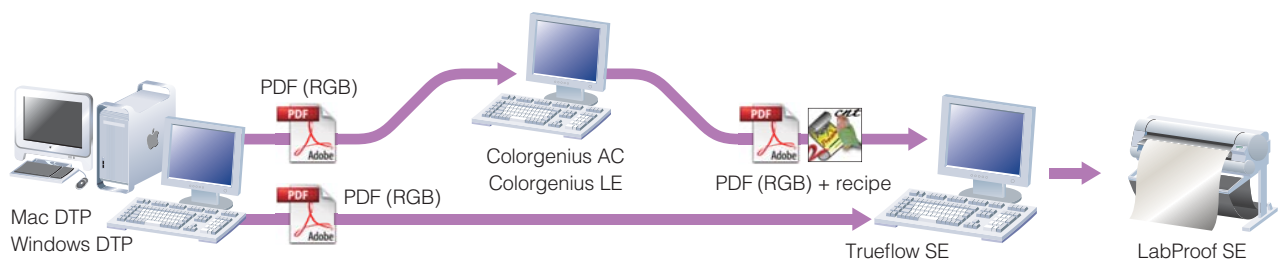
Colorgenius LE/AC: Color quality solution for an advanced RGB workflow

The biggest problem in RGB to CMYK conversion is ensuring that the feel of the original image is reproduced when the image is printed.

Colorgenius LE, which is bundled with Trueflow SE, is an Acrobat plug-in that specifies instructions (recipe files) for converting files submitted in RGB/PDF format to CMYK, and also makes it easy to simulate printing output as many times as desired. It automatically handles high-level printing processing

issues, such as total ink volume and resolution conversion, so the operator can focus on adjusting the desired image finish.

Colorgenius AC, which is available for an additional charge, enables more precise image finish adjustments. It features a sharpness AI that automatically corrects the sharpness for each image and has a multiple image setup function that is useful in a variety of situations, for example when the operator wants to match the look of the backgrounds of multiple images.



LabProof SE: For remarkably accurate color proof output

LabProof SE is a high-quality color proofing system that takes full advantage of the strengths of inkjet printing. Users can preset LabProof SE processing to a Job ticket to enable automatic output to the LabProof SE and inkjet proofer output. Spot color information and printing conditions can be transmitted in the printing instructions, which makes LabProof SE extremely fast and easy to use. LabProof SE status during printing can be

ascertained with the aid of JMF.

It accepts RIP'ed CMYK TIFF and 1-bit TIFF files and outputs them on a large-format inkjet printer. LabProof SE uses industry-standard ICC profiles and color chart measurement for color matching and creates color proofs that are as close to the final printed product as possible.

What is Recipe technology?

"Recipe" is one of the Screen's innovative technologies using its cultivated color separation know-how from high-end scanners. Recipes contain all the information needed for effective conversion of RGB data to CMYK, including conversion tables, keywords, and more. Since they are conveyed as a separated file from the original image data, the original photo quality is maintained, which improves the quality and also benefit image data archives and even re-setups of image data archives or even for re-setups of preliminarily converted CMYK data. You can also use Recipe to share color settings information with your team or apply it to all the similar images. If desired, recipes can be secured with passwords to protect your color setup know-how.

Together with Trueflow SE recipe conversion option, you can get an experienced operators' quality by easy one click setups. When Colorgenius LE/AC, an Acrobat plug-in, is used to specify a recipe file for RGB images, those images remain in the original RGB until the very last RIPing by Trueflow SE with Adobe PDF engine, and converted to CMYK with the desired finish. This ensures that the lovely gradation quality characteristic of RGB images is not lost in intermediate processing, as well as preserving the desired image finish and increasing production efficiency.

End-to-end Prepress Production Solution

Useful Workflow Applications

FlatWorker SE: Professional plate design software

FlatWorker SE is page imposition software that creates page imposition instructions for Trueflow SE. It supports a variety of data formats such as CAD data, EPS, PJTF, JDF-JOB, Outline PDF and Outline PDF-Advance while it produces JDF and CIP3/4 certified PPF for workflow automation.

Plate design

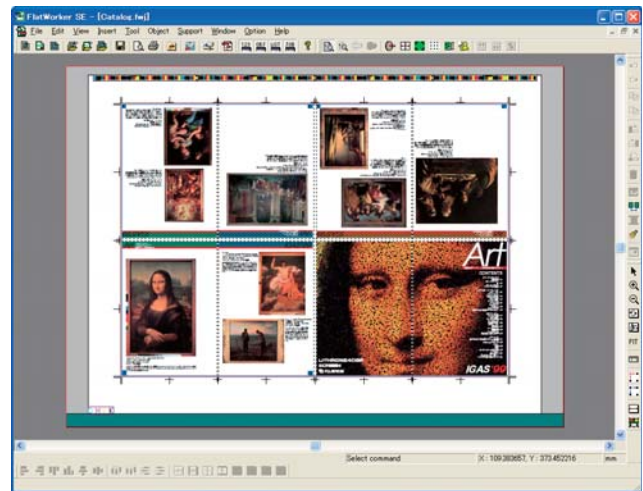
FlatWorker SE can be used for everything from page imposition to laying out packages, creating step-and-repeat data. It automatically checks for problems such as elements that protrude past the edges of the paper or plate, and overlapping elements, which it highlights in the display of the plate.

Templates

Templates can be designed that include plates, paper and signatures, indicating the positions and orientations of pages, and so making the operator's job easier.

Accessories

Accessories such as colorbars, flat numbers and printing marks can be input in the form of EPS files and then positioned on the plate or paper.



Editing and simulation of spine marks and collating marks

Text, variables and figures can be combined to create spine marks and collating marks. These marks can be edited and then simulated on screen for easy checking. Items can be set up to repeat, making it easy to create repeated marks.

Riteapprove SE: Online automation for Trueflow SE

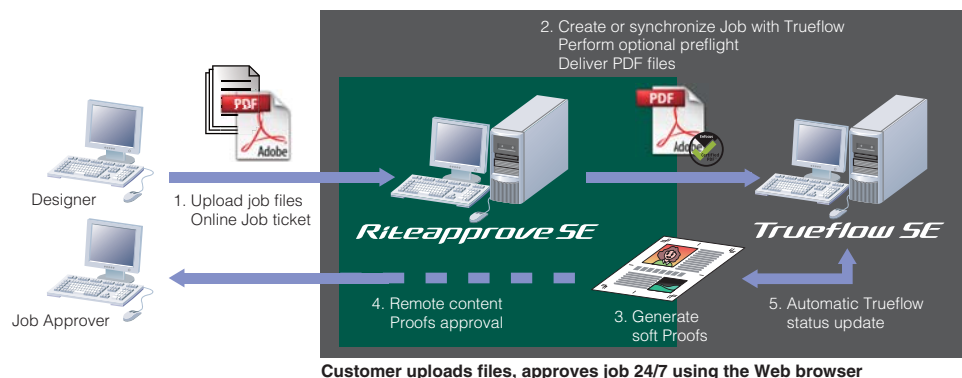
Riteapprove SE connects, communicates and secures.

Riteapprove SE extends the printer's production environment to the customer's desktop. Using the Web browser from any computer, customers can communicate their job requirements directly into the production environment anytime, anywhere; preventing mistakes at an early stage.

Riteapprove SE is an easy-to-use, online job submission, remote proofing and approval solution for Trueflow SE. Riteapprove SE automates the overall production cycle, shortens the time from prepress to press, and improves customer experience. Leveraging the power of the Internet, you are virtually open for business 24/7, anytime, anywhere.

Automatic Job integration with Trueflow SE

A customizable job specification is assigned to each job published on Riteapprove SE to provide a custom online Job ticket form as well as processing instructions. Based on the job specification, Riteapprove SE seamlessly integrates with Trueflow SE to create a new job entry, deliver PDF files, provide an online proof for remote approval, as well as file revisions upload, comparison, replacement and approval status updates.



Ritecontrol SE: Automated prepress manager

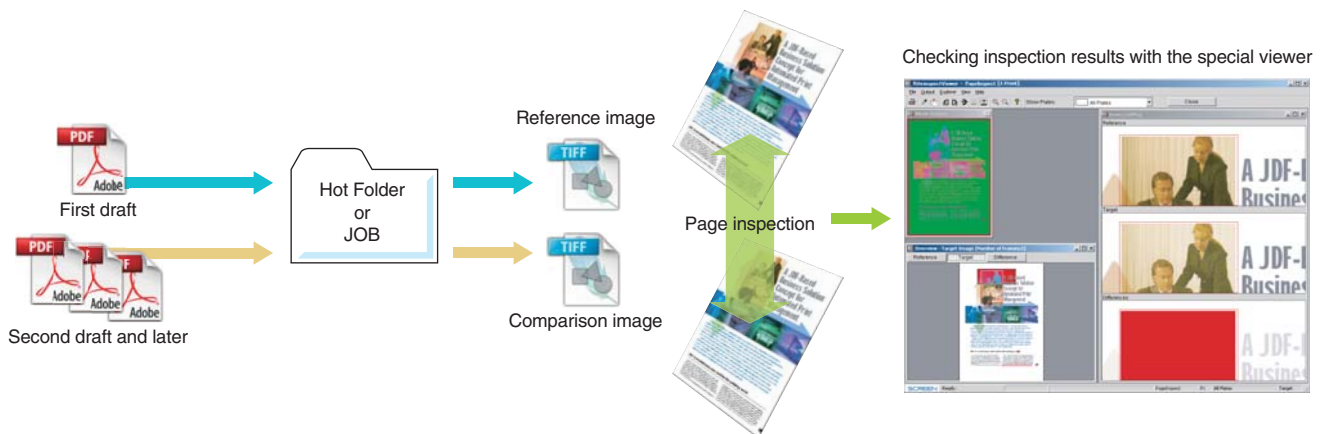
Ritecontrol SE is a prepress process control system that is compatible with JDF. It links seamlessly with Trueflow SE to help optimize overall prepress processing efficiency. It offers unified management of multiple workflow RIPs and can distribute the processing load between different stations to maximize the operating ratio of equipment.

Ritecontrol SE ensures a stable supply of plates and improves the overall system performance. It can work extremely well with MIS systems using JDF/JMF data and reduce tasks for repeat orders utilizing previous JDF job information. It can also output and transfer ink preset PPF data to printing press and cutting information JDF to postpress, in order to promote coherent workflow automation.

Riteinspect: Powerful support for page and plate inspection

Page inspection makes it possible to check for editing errors and color specification problems before the data is imposed. The originally received PDF (or PS) file is used to create a reference image (TIFF) for page inspection. A comparison image (TIFF) is created using the file that was input for the second draft or later, and the two images are compared page by page. File name rules that make it easy to find the appropriate files can be used to enable automatic inspection of the reference and comparison files. The results of the inspection are displayed

in the Trueflow SE progress screen. If problems are found, the operator can use a special viewer to check the inspection results for each separation in the job, including spot color separations. Differences between the reference and comparison data are displayed clearly, which makes them easy to spot and assess. There is also an automatic printing function that can be used to create printouts of the inspection results. As in the past, Riteinspect can be used for plate inspection after impositioning is completed.



Trueflow SE JobArchiver: Efficient archiving system

Data backup that does not reduce processing efficiency

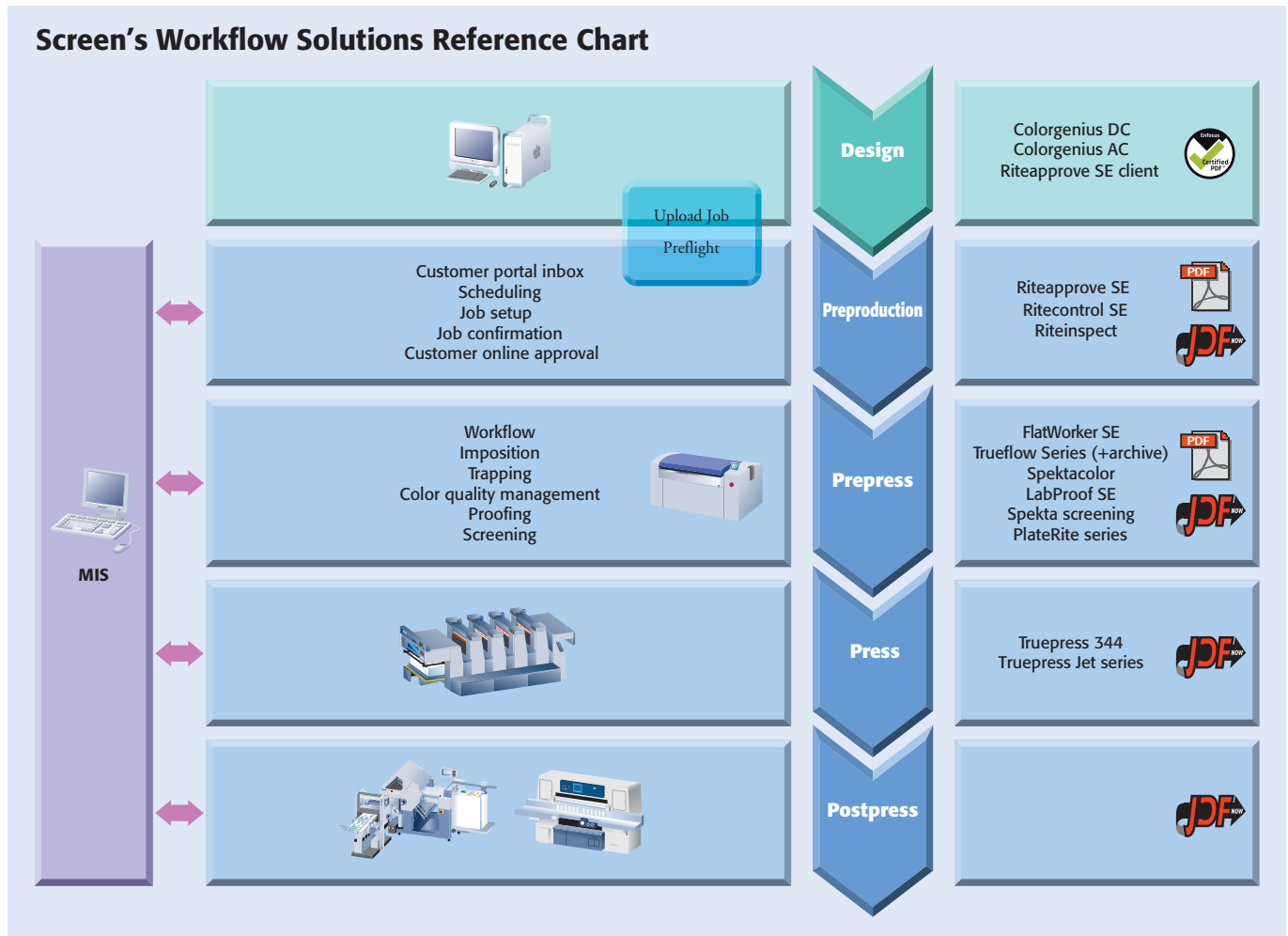
At the core of the workflow handled by Trueflow SE is the creation of a variety of job and raster data files. Trueflow SE's JobArchiver stores these files in a compact form, and restores them quickly when they are needed. Its expeditious archiving ensures efficient operations, and it is also extremely easy to

use. It works well with Trueflow SE and even supports multiple installations of Trueflow and Ritecontrol SE to create an efficient archiving system. JobArchiver can be set up to archive anytime – for example, the operator can make settings so that data is archived in the middle of every night, when processing workloads tend to be lower.

Market driven solutions

At Screen, we are able to deliver solutions for a wide range of print markets. These include commercial printing, packaging, newspapers and digital printing.

The underlying principle for all markets is to help printers achieve automated production right from their customers' desktops through to printing, finishing and beyond.



DAINIPPON SCREEN MFG. CO., LTD.

HEAD OFFICE
 • Teranouchi-agaru 4-chome, Horikawa-dori, Kamigyo-ku, Kyoto, 602-8585 Japan/Phone +81-75-414-7610/Fax +81-75-414-7608

SCREEN (USA)
 • 5110 Tollview Dr., Rolling Meadows, IL 60008, USA/Phone 847-870-7400/Fax 847-870-0149 www.screenusa.com

DAINIPPON SCREEN (DEUTSCHLAND) GmbH
 • Mündelheimer Weg 39, 40472 Düsseldorf, Germany/Phone 0211-472701/Fax 0211-4727199/Telex 858-4438 DSDDD D

DAINIPPON SCREEN (U.K.) LTD.
 • Michigan Drive, Tongwell, Milton Keynes, Buckinghamshire MK15 8HT, UK/Phone 01908-848500/Fax 01908-848501 www.screen.co.uk

DAINIPPON SCREEN (NETHERLAND) BV
 • Bouwerij 46, 1185 XX Amstelveen, Holland/Phone 020-4567800/Fax 020-4567805 www.screen-europe.com

DAINIPPON SCREEN SINGAPORE PTE. LTD.
 • 29, Kaki Bukit View, Kaki Bukit Technopark II, Singapore 415963/Phone 67493833/Fax 67499010 www.screensp.com.sg

DAINIPPON SCREEN (CHINA) LTD.
 • Room 2001 - 2003, 20/F Cable TV Tower 9 Hoi Shing Road Tsuen Wan, N.T. Hong Kong/Phone +852-2953-0038/Fax +852-2755-8683

Beijing office/Phone 010-6708-9271, 9272, 9273/Fax 010-6708-9395
Shanghai office/Phone 021-3126-5122/Fax 021-5218-2199
Guangzhou office/Phone 020-3881-1112/Fax 020-3881-1036

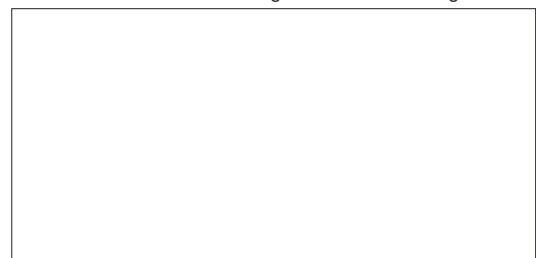
DAINIPPON SCREEN (TAIWAN) CO., LTD.
 • 4F No. 126-1, Ming Tsu West Rd., Taipei, Taiwan/Phone 02-25862711/Fax 02-25914367

DAINIPPON SCREEN (KOREA) CO., LTD.
 • 10th Yonsai Bldg 4B-3, 1Ga, Songnae-Dong, Joong-Gu, Seoul 100-161, Korea/Phone 02-7766-786/Fax 02-7766-787

DAINIPPON SCREEN (AUSTRALIA) PTY. LTD.
 • Suite 11, 2 Eden, Park Drive, Macquarie, NSW2133, Australia/Phone +61-2-9016-3400/Fax +61-2-9016-3425

Internet web site : www.screen.co.jp
www.screenusa.com
www.screen-europe.com

• This brochure was made using SPEKTA 2 screening.



We reserve the right to alter product designs and specifications without prior notice.