

Truepress JET 520HD mono

Monochrome high-speed roll-fed Inkjet digital printing system

**Next-generation monochrome inkjet press
optimized for offset coated papers**



Truepress ink SC+



Cutting-edge innovation in mono

The Truepress JET 520 series of printing systems have enjoyed worldwide adoption by many printing companies.

Optimized for monochrome printing, the Truepress JET 520 HD mono high-speed, roll-fed inkjet press is now available for production.

The cutting-edge system features innovative technologies that transform black only printing work.

■ Direct printing onto offset coated papers



■ Independently developed inks

Our SC+ inks are proprietary water-based inks designed to print directly onto offset coated paper. Their unique permeability and adhesion technologies eliminate the need for an anchor coat while helping to preserve the texture of papers and reduce operating costs.

SC+ inks offer high density with no bleeding, enabling the formation of sharp, well-defined dots. This allows the Truepress JET 520HD mono to create rich, vibrant color comparable with offset printing. The reproduction of deeper blacks opens up new, higher-quality applications that will allow printing companies to truly differentiate themselves.

A chill roller (option) may be required depending on printing conditions.



■ Enhanced usability



■ Tablet-based printer operation

All operations along the entire workflow from job registration to final printing can be performed from a tablet device. This greatly simplifies operations such as preregistration of paper data and fine adjustments to settings.

Even when an operator is in a different location, it is easy to issue commands and check conditions. This increases the onsite efficiency of staff and also maximizes the operating ratios of printing equipment.

Mono

chrome printing

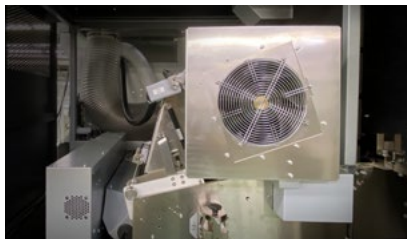
High productivity and quality



Maximum speed of 150 m/min, highest resolution of 1,200 dpi

The Truepress JET 520HD mono delivers both exceptional throughput of up to 150 meters per minute and outstanding quality enabled by its 1,200 dpi high-resolution inkjet printheads. As well as sharp reproduction of type and barcodes, the system produces smoother gradations in any image. The Truepress JET 520HD mono can connect directly to postprocess devices, which expands automation and can lead to even greater gains in usability and productivity.

Speeds of 120 and 150 m/min cannot be used for coated paper.



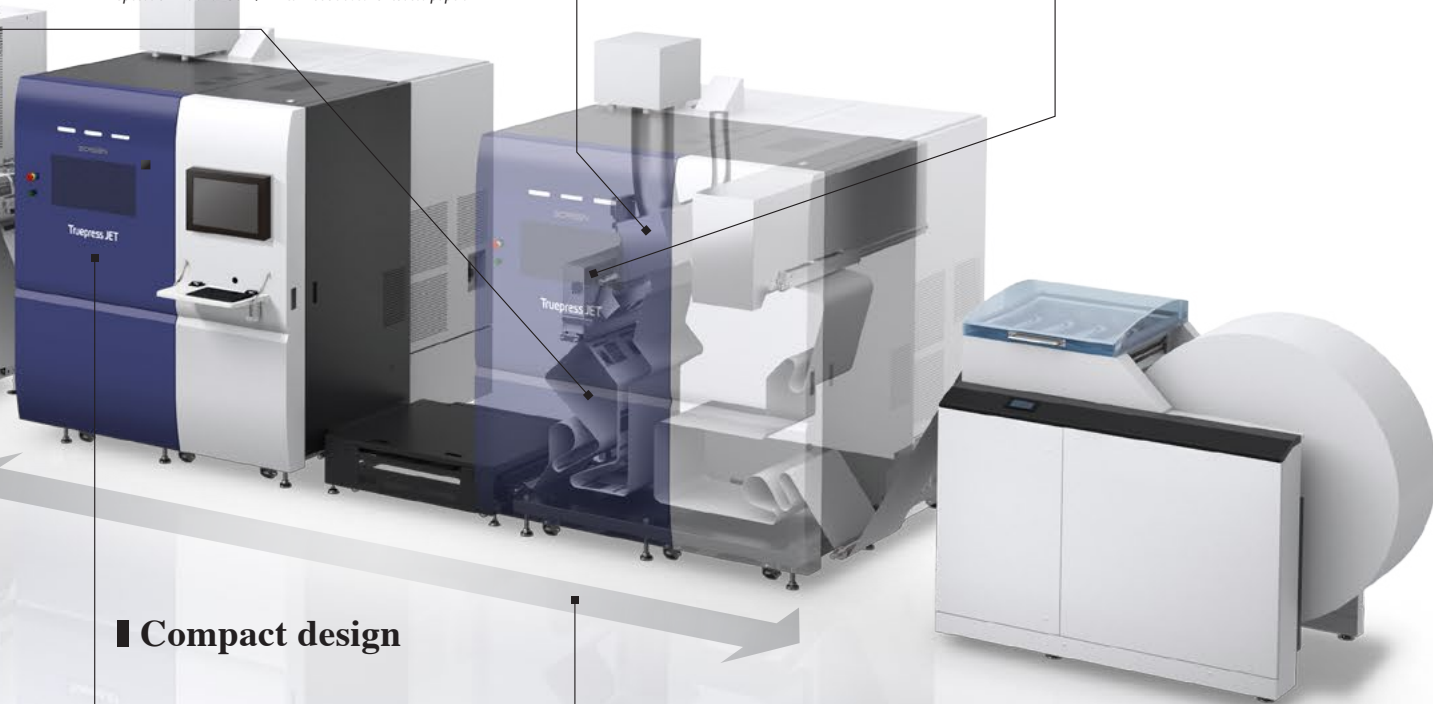
Dryer with high heat conduction

The Truepress JET 520HD mono dryer is a compact near-infrared (NIR) unit that features extremely efficient thermal conduction. The system provides the ability to handle a wide range of paper types.



Quality control using built-in high resolution scanning and inspection solutions

Presses equipped with multiple printheads often face issues related to density variations between the heads. JetInspection, built-in high resolution scanning and inspection solutions, automatically check and adjust these differences to ensure uniformity. JetInspection also integrates with the proprietary transfer system to boost performance while maintaining stability.



Compact design

Preinstalled with EQUIOS server

The EQUIOS workflow server is built directly into the printer's control computer, avoiding the need for external installation. This reduces space requirements and equipment cost.

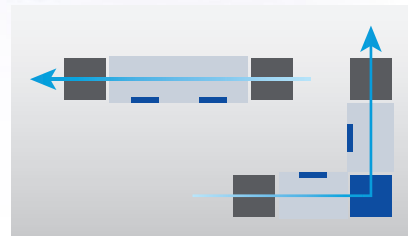
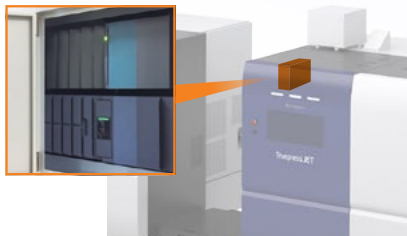
Smallest installation footprint

The Truepress JET 520HD mono features the smallest installation footprint of any press in the Truepress JET 520 series. The layout of the printhead module, transfer system and other internal components has been redesigned.

The resulting highly compact configuration makes it possible to install the press in locations with limited space. The proprietary multi-axis structure of the transfer system also enables high-speed roll transport with total precision and reliability.

Flexible system configuration

The adoption of an open interface allows smooth connection with cutting and folding machines as well as a wide array of other processing devices. This extended compatibility enables the creation of production environments optimized for different applications.



Data Print Business



The Truepress JET 520HD mono is ideal for producing materials such as billing statements, direct mail and notifications. As a roll-fed press, its superior productivity and quality create a range of new possibilities for the data print business.

Exceptional productivity of roll-fed presses

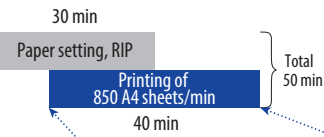
The Truepress JET 520HD mono is able to rapidly handle the overprinting and one pass processing required for data printing. It delivers around seven times the throughput of digital sheet-fed presses (120 A4 sheets per minute).

Productivity of several toner POD units in one system

The Truepress JET 520HD mono can output the equivalent of up to 68 million A4 sheets per month, providing the production capacity of multiple toner POD units in a single system. It eliminates the need for settings and operators for each printing press, and can strongly promote the time and cost efficiency of work.

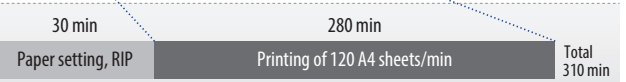
Overprinting of over 34,000 A4 direct mail letters in just 50 minutes!
Small, medium and large jobs can be mixed and run sequentially!

Truepress JET 520HD mono



When two A4 direct mails are imposed on paper with a 440 mm width.

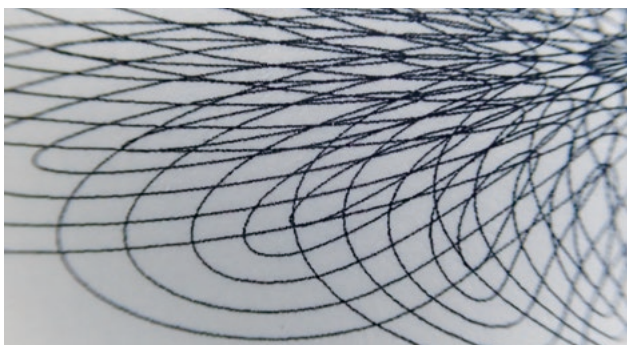
Toner POD



More than four hours is needed for overprinting of the same 34,000 A4 direct mails...

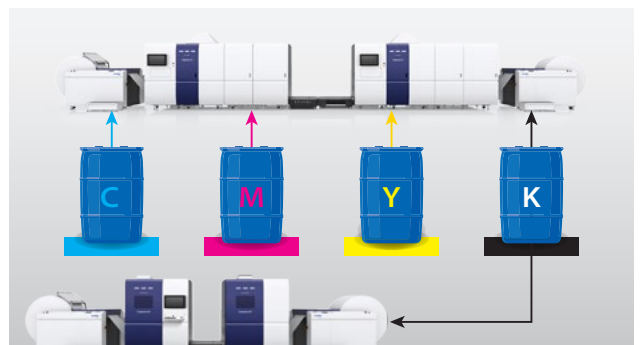
Accurate reproduction of tables and middletones

Thanks to its high-precision 1,200 dpi inkjet printheads, the Truepress JET 520HD mono offers ultra-sharp reproduction of both knockout and standard text in tables with shaded backgrounds. Breaks in the fine lines of these tables can also be eliminated.



High reliability during long-run operation

Even when operating continuously over long periods, the Truepress JET 520HD mono maintains its usual outstanding quality. This allows even high-volume data printing jobs to be completed with short turnaround times. The system's high-capacity ink tanks (option) also help to minimize the downtime required for ink replacement.



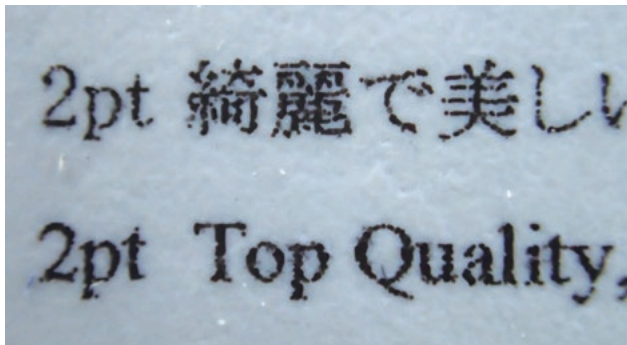


On Demand Book

The Truepress JET 520HD mono offers quality and productivity levels rivaling offset printing. It can effortlessly handle a diverse range of small lot jobs with different page sizes and counts, including teaching materials, study resources, manuals, reissues and reprints.

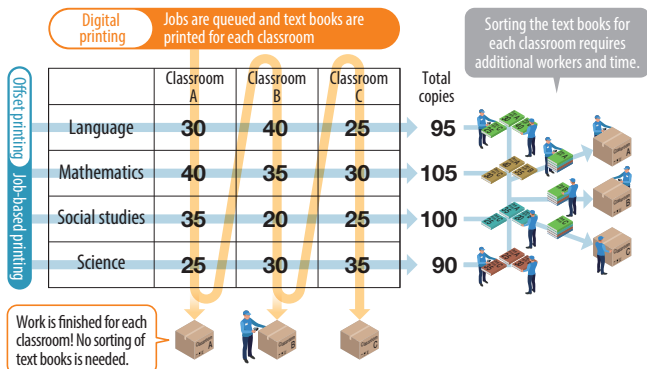
Precise reproduction of microtext

With its 1,200 dpi high-resolution print quality, the Truepress JET 520HD mono is able to faithfully reproduce any illustrations, super/subscripts, formatted lines or shaded areas. Even the microtext used in annotations and notes remains highly legible.



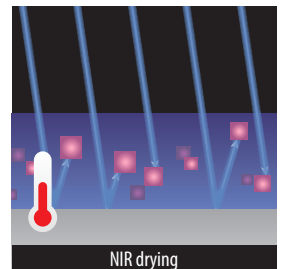
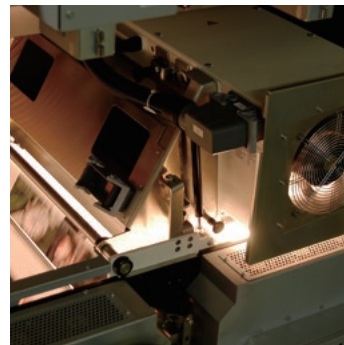
Highly automated, streamlined workflows

Smooth connectivity with postpress systems and the ability to issue processing commands from a tablet significantly reduce the operations required during production. Sorting of output by copy volumes can be performed for optimum efficiency, something that is not possible with offset printing.



Seamless handling of light papers

The Truepress JET 520HD mono is equipped with grayscale printheads that precisely control droplet size and transfer and tension control specifically designed to handle papers as light as 40 gsm. They effectively prevent ink bleed-through and paper breakages. The system is fully compatible with paper thicknesses ranging from 40 right up to 250 gsm.



SCREEN's near-infrared (NIR) drying unit features rapid drying with extremely efficient thermal conduction.

Highly versatile Truepress inks

SCREEN's proprietary Truepress ink SC+ range of fast drying, high-density inks can be printed directly onto offset coated papers. High-resolution printing of outstanding quality is now possible on a wide range of papers, including standard coated, matt coated, woodfree, art post and matt post types.

Truepress ink SC+
for Truepress JET 520HD

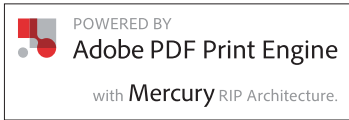


EQUIOS solution platform: Proven results with the Truepress JET 520 series

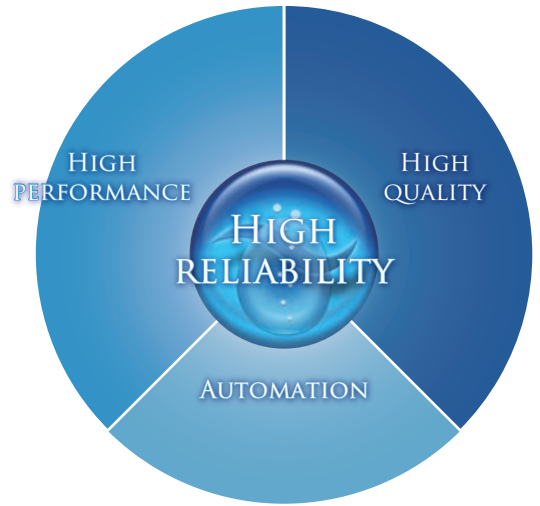
EQUIOS

EQUIOS is a solution platform that draws on SCREEN's extensive prepress and printing knowledge to maximize the performance of our cutting-edge inkjet technology. EQUIOS offers high-speed processing using Adobe's PDF Print Engine 4 and Mercury RIP Architecture. EQUIOS includes advanced prepress workflow capabilities such as preflighting, color management and imposition functions specifically designed for roll to roll processing printing.

These features have been developed based on SCREEN's extensive experience and encompass the full range of our professional knowledge. Together they help to provide a work environment that is powerful and easy to use.



The Mercury RIP Architecture is a scalability framework and distributed multi-tier cache technology developed by Adobe for its PDF Print Engine. Mercury enables enhanced, high-performance rendering and is essential for digital presses as well as variable printing. The EQUIOS solution platform for the Truepress JET 520HD mono incorporates this advanced RIP architecture.



Ultra-fast processing of high-volume data

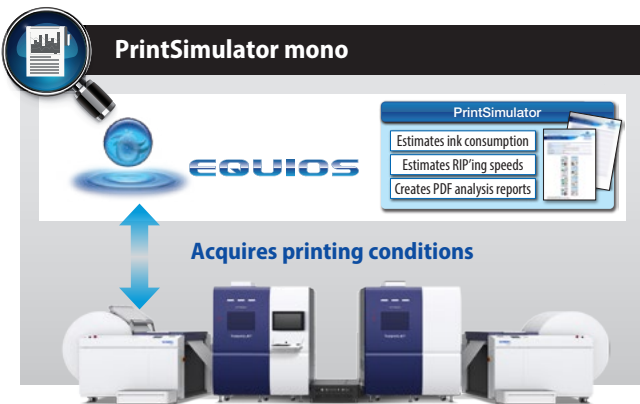
RIP'ing speed is vitally important when printing with a high-speed web press. EQUIOS utilizes parallel processing and effectively works with the Adobe's Mercury RIP Architecture to maximize speed by intelligently determining the order to process PDF objects and what objects to RIP and reuse. The result is less time waiting for printing to start and more time printing.

Proprietary screening technologies

The Truepress JET 520HD mono utilizes SCREEN's proprietary screening technologies, enabling optimal display of gradations in images from highlights and shadows through to middletones. This system also minimizes moire and broken lines to produce high-definition output.

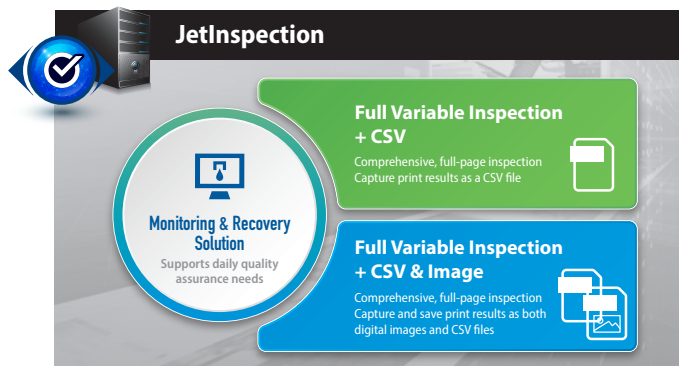
OPTION

Precise understanding of production schedules and costs based on advance simulations



PrintSimulator mono (option) provides accurate estimates of ink consumption and enables the creation of PDF analysis reports by assessing PDFs to be printed and listing any issues that may exist in those PDFs. The software performs a range of test operations before actual printing and can be run manually or via an automated process. These features help you to understand production schedules and costs, which can lead to significant improvements in press profitability.

Strict monitoring of print quality and results using built-in high resolution scanning and inspection solutions



In addition to OCR font reading and barcode decoding, JetInspection offers real-time scanning of every part of every page, including high-resolution variable images. Proprietary AI technology also provides precise, real-time inspection of all printed matter, enabling outstanding control of print quality.

Note: The AI engine has already been trained using actual printed images and does not include an automatic learning function. This prevents the deterioration of inspection accuracy due to incorrect learning. Monitoring & Recovery Solution is available with all systems.

New solutions for print businesses

Data Print Business

1 SOLitrack automatic data distribution

Partner product

Solimar's SOLitrack offers a variety of advanced functions for data printing. The system can be connected to multiple presses to provide automatic distribution of data and visualization of operating ratios. SOLitrack links seamlessly with the Truepress JET 520 series, enabling it to display real-time processing information including media and ink usage plus operating ratios.

2 Line synchronization tool

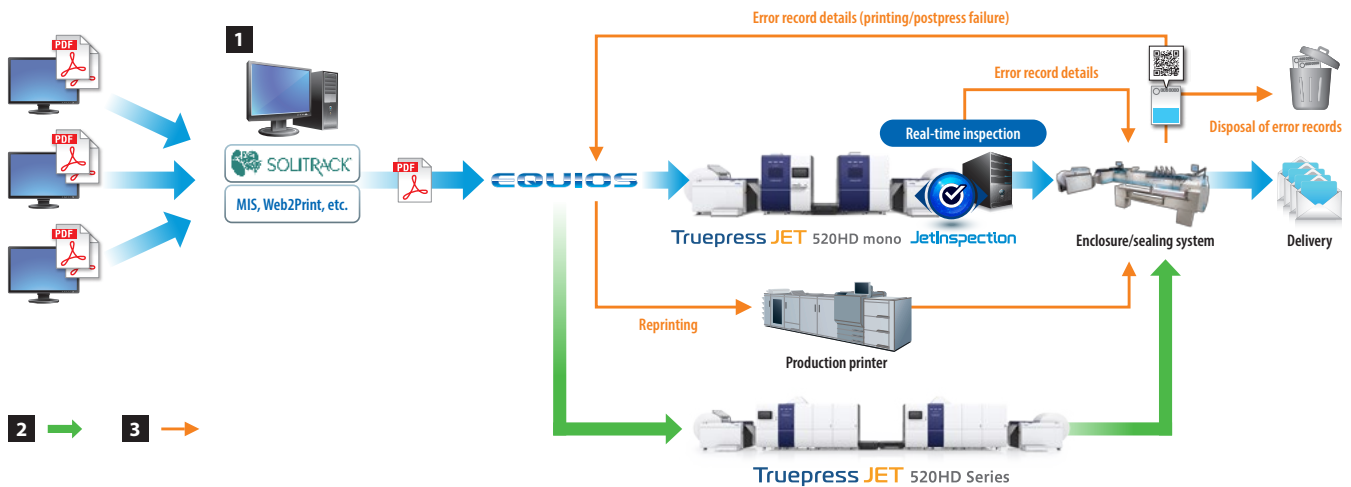
This tool enables color matching to be easily performed across multiple Truepress JET 520 production lines. It is able to rapidly share print conditions and job templates containing imposition data with each line. This means that even if a press is stopped for maintenance, printing can be immediately started on another line.

OPTION

3 Automatic ejection and reprinting of rejected sheets

OPTION

If a print error does occur, any affected pages can be automatically ejected from a postpress system without stopping the press itself. This helps to maintain both optimal productivity and quality control. The rejected pages can be identified and managed by linking them to their recipient, allowing reprint instructions to be sent smoothly to a separate press.



On-demand Book Business

4 Improved automation with Smart Job Binder

OPTION

Jobs sent from an MIS or Web2Print interface can be automatically grouped by size, copies or turnaround and then transferred to EQUIOS. Once EQUIOS receives the jobs, it rapidly and automatically executes a sequence of processes including job creation, imposition, output setting, barcode/mark application and RIP processing. It then links with postprocess systems to finalize the production of a diverse range of small lot books.

5 Roll-fed imposition of books

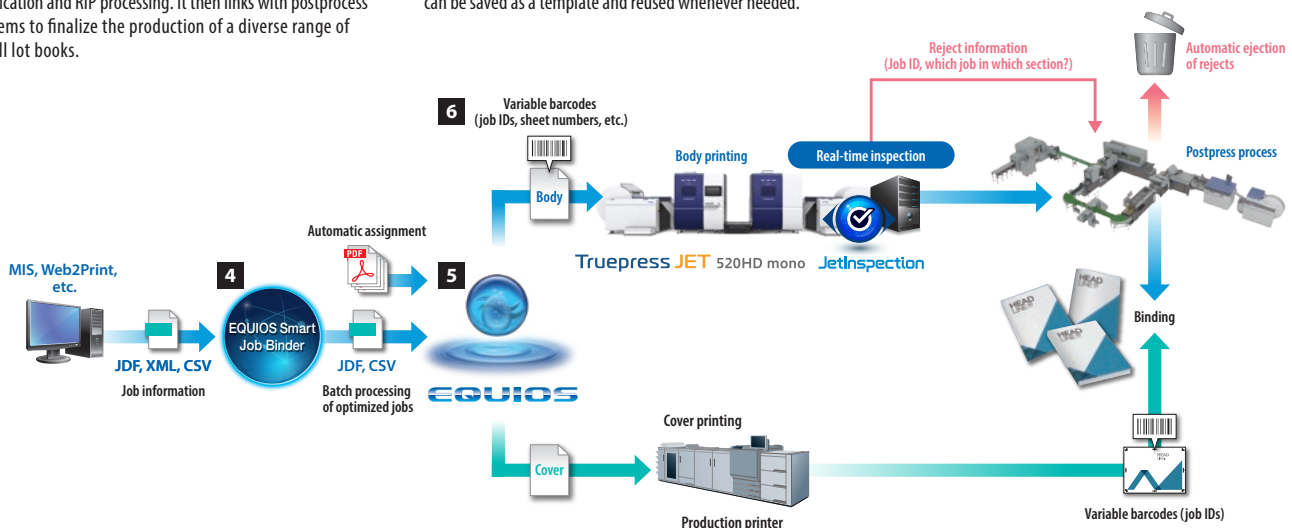
OPTION

Book production involves a wide range of processing systems, requiring the output of many different fold patterns. Being able to easily and accurately create optimal imposition schemes for these processing systems greatly simplifies the advance preparations for printing. After a scheme has been produced, it can be saved as a template and reused whenever needed.

6 Automatic creation of control barcodes for processing systems

OPTION

The Truepress JET 520HD mono is equipped with units for generating the DataMatrix, QR and other barcodes needed to control processing systems. These units work with the imposition functions to automatically produce complex control barcodes in response to requests from the processing systems.



Truepress JET 520HD mono specifications

Printing system	Inkjet, Piezo single-pass DOD
Controller	EQUIOS: PS, PDF, PDF/VT (standard)
Inks	Truepress ink SC (BK), Truepress ink SC+ (BK)
Resolution	Max. 1,200 × 1,200 dpi
Printing speed	Max. 150 m (492')/min. (with option)
Printing width	150 to 508 mm (6" to 20")
Media width	165 to 520 mm (6.5" to 20.5")
Media weight / Media thickness	40 to 250 gsm (up to 157 gsm at a speed of 150 m/min.) / 50 to 254 μm (2 to 10 pt)*
Operating environment	Temperature: 18 to 24°C (64.4 to 75.2°F) (no sudden temperature changes) Humidity: 40 to 60% (no condensation)
Dimensions (W × D × H)	1,780 × 2,025 × 2,403 mm (70.1" × 79.7" × 94.6"), D: 2,300 mm (90.6") including keyboard, H: 2,000 mm (78.7") when being installed
Weight	Approx. 1,800 kg (approx. 3,960 lb)
Drying system	NIR dryer
Power requirements	Printer Controller: Three phase 200 to 240 V, 30 A Controller PC: Single phase 200 to 240 V, 20 A NIR dryer: Three phase 400 to 480 V, 45 A

* Paper compatibility can be influenced by paper specifications including stiffness.



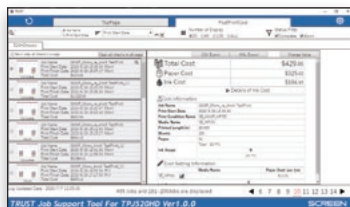
Real-time maintenance minimizes down time

TRUST Network Service

TRUST Network Service is a proprietary support program provided by SCREEN to prevent unexpected problems. This program offers a full menu of services including predictive diagnosis based on monitoring of equipment conditions, as well as regular analytical and maintenance reports. If trouble does occur, TRUST is able to identify the area of malfunction and alert the operator as well as log the instance for reporting purposes.

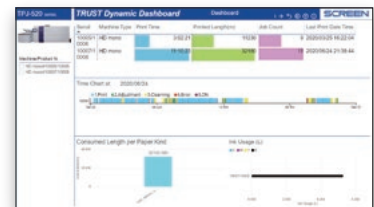
Job support tools

Usage statistics for ink, paper and other items make it possible to accurately calculate the cost of individual jobs. Job logs and consumption data can all be checked locally by users as required.



Dynamic Dashboard

The dashboard allows cloud-based monitoring of the operating status of Truepress JET 520HD mono presses. Usage of consumables such as inks and papers can be checked at a glance, while data for printing, head cleaning, adjustment and processing errors are all presented in time charts for instant understanding. These details make it easy to confirm systems are running at peak efficiency.



Please contact your local SCREEN representative for further information.

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No.205-191E V6-E SCI 06-25

Printed by the Truepress JET 520HD+ / Truepress ink SC