SCREEN
MEDIA TECHNOLOGY

TruePress 344

Digital offset press

Innovation & Reliability

Advanced automation and new processless plate technology are just two of the unique features of this high-performance A3 digital press.

The TruePress 344 is an A3 four color digital offset press that incorporates the very latest in innovative imaging and plate technology, as well as state-of-the-art automation and quality control.

This remarkable digital press uses the latest processless thermal plates, which do not require chemical processing, thus setting new ecological standards for printing technologies. Using a new, innovative MALD (Multi Array Laser Diode) imaging head that can expose 4 printing plates simultaneously in just 5 minutes, plate imaging with the TruePress 344 is remarkably fast.

The TruePress 344 is an A3 four color offset press that prints 7000 impressions per hour. Printing with the conventional wet offset process ensures high print quality and flexibility, plus economical running costs by using traditional inks and paper.

Automatic feeder set up at the touch of a button enables the operator to print everything from postcards and envelopes (minimum size 90 x 148 mm) to A3 size (340 mm x 470 mm) papers.

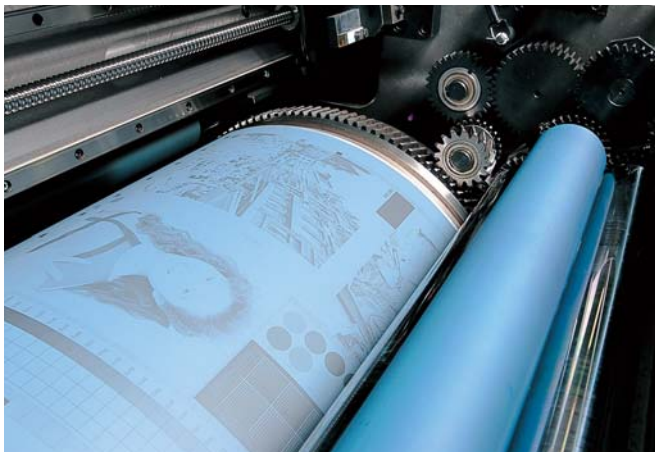
The TruePress 344 is fitted with TrueFit Advance, an automatic print quality management system that automatically controls ink key and dampening solution levels throughout the print run to assure consistently high quality with minimal operator intervention.

High quality and throughput

All the capabilities of a traditional offset press and more

Excellent print quality

The TruePress 344 is a unique digital press using the traditional wet offset printing process, to create high quality prints on a wide range of substrates. In addition, the first generation digital dot ensures that optimal image quality is transferred directly to the plate, ensuring high color quality in print and perfect registration. All of the features of the TruePress 344 are designed to suit the on-demand printer without compromising print quality or limiting the types of substrates that can be used.

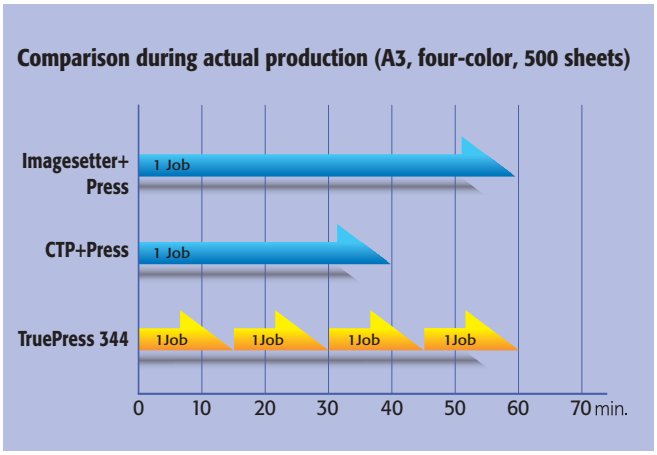


Great productivity through better imaging

Job changeover is a fully automated process. Plates are imaged simultaneously, blankets are cleaned, the feeder unit is set and ink ducts are calibrated using the CIP 4 data file. In just over 5 minutes the press is ready to start the next job. Run up time is minimized by TrueFit advance, so within 30 – 50 sheets optimum print quality is reached. With high running speeds of up to 7000 sheets per hour the number of jobs per working day is exceptionally high.

Variable plate support

The TruePress 344 makes it easy for a single designated plate to be replaced with a new one. The most typical example of this would be replacing just the black plate, so that the text information is altered for a language variation. In such a case the user is assured of accurate registration and fit.



Easy maintenance

The TruePress 344 requires less time and effort for standard maintenance, thanks to automated cleaning of blankets, plate cylinders, dampening solution rollers, and ink keys. In addition, the twin printing tower design gives the operator fast and easy access to all areas of the press.

Optimised running costs

Compared to other digital presses, a number of factors make the TruePress 344 unique in its cost of operation. Printing with standard inks and paper, plus the use of chemical free plate processing provides a low consumable cost. Coupled with the potentially high number of jobs per workday, this ensures that the cost per job at run lengths of 100 to 5000 sheets is very competitive.

Environmentally and ecologically safe

In addition to the obvious benefits of cost savings, shorter processing times and safety, reducing the use of corrosive chemicals creates a safer working environment and complies with stricter government legislation.

Compact and robust design

Quality is a critical feature of the TruePress 344. Built upon on a 4.5 cm thick metal frame, the machine's sturdiness reflects the quality of manufacturing. From the inking and dampening train to the transfer and cylinder units and the on press-imaging unit, all aspects of the Truepress 344 were designed with stability and durability in mind, providing reliability and performance comparable to any other high quality press.

Automation

Easy operation through advanced automation and quality control systems

Easy set-up and consistent quality control with TrueFit Advance

The TruePress 344 doesn't require operators to pull sheets for ink density checks or manually adjust ink and dampening water levels. TrueFit Advance is an automatic print quality management system that provides real-time analysis of ink levels that is operated through an easy to use touch screen located at the delivery end of the press.

Calibrated to the data from the CIP4 file, the system cross-references the original file data to provide accurate set up. Thereafter TrueFit Advance scans and analyzes printing data every six sheets. Based on the analyses it automatically adjusts ink keys and water dampening supply levels to ensure consistent quality from the beginning to the end of the print run. TrueFit Advance can also store job data from a previous job, making it possible to recall the data and get a repeat job up and running in less time.

Operating the press

The TruePress 344 is designed so one operator can manage the entire operation from workflow to printing. Advanced automation means that operation is efficient and easy, enabling operators of various skill levels to achieve consistently high quality results.

Automatic paper positioning

In addition to its other advanced automation systems, the TruePress 344 features a new automatic paper positioning adjustment system that makes for easier operation. The operator simply enters the paper thickness, type, and size on the central command console, and the system calculates the adjustments specific to the substrate characteristics.

Shorter make-ready and startup

Fast job changeover is a key feature of this print-on-demand press. The CIP4 file is analyzed by the system to automatically set ink ducts keys and the dampening system for each new job. Optimum run quality is attained using only 30 to 50 sheets.

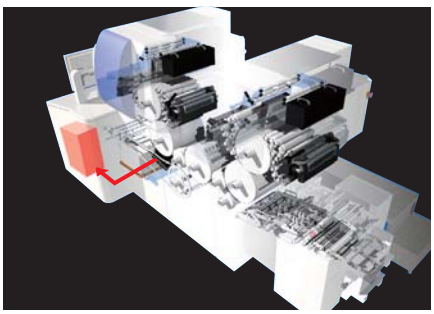
Color density management using target image areas

The color density management scanner measures representative points across the image automatically, or the operator can use a touch screen to manually override the selection in order to choose whichever points he wishes. The scanned image data is fed back to the control unit and analyzed for ink and water adjustment. This unique color management system assures high quality and consistency of output.

Automatic control of dampening solution

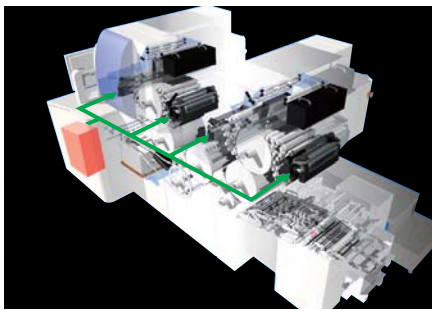
TrueFit Advance measures a unique data control strip to assess the required amount of water to maintain the optimum balance of ink and water. The unique algorithm calculates and automatically adjusts dampening solution levels as necessary. This system assists the operator in maintaining stability and ease of operation.

1. Ink densities and dampening solution levels are measured as sheets come out of the TruePress.

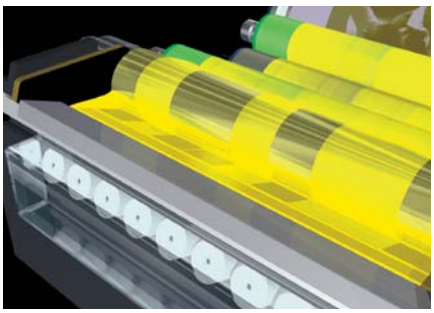


2. TrueFit Advance monitors ink densities and dampening solution levels in real time during the print run.

3. Current density readings are compared to target levels.

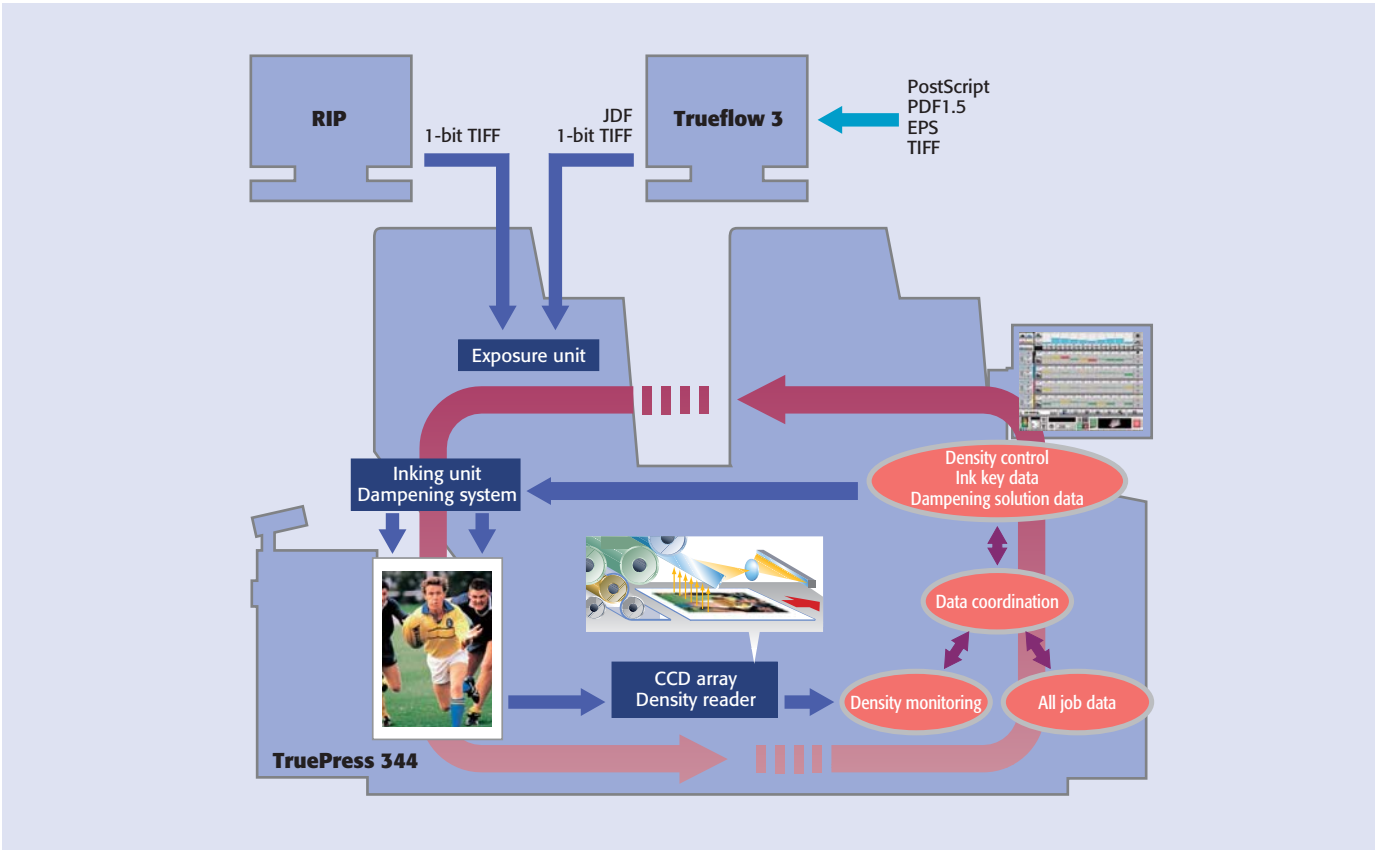


4. Ink keys and dampening solution settings can be adjusted immediately.



5. A consistent ink-water balance is achieved.

TruePress working with TrueFit Advance



Traditional ink density management

The operator extracts sheets at points in time (**A**, **B**, and **C**) during printing. The measured density is compared with the target density.

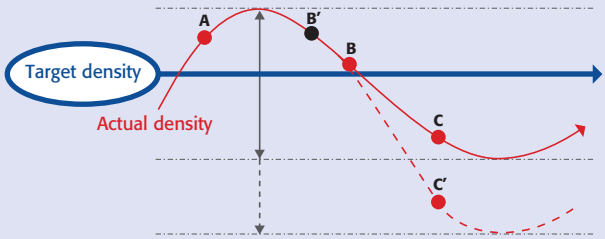
At **A**, the density is too high, so it must be reduced.
At **B**, the density matches the target.
At **C**, the density is too low, and must be increased.

The ink keys are adjusted as necessary at each point in time. Unfortunately, measuring a single sheet that has been pulled from the press does not provide information about trends in ink density. For example, if a sheet were pulled and measured at time **B'**, the operator would make settings to decrease density, despite the fact that the density is already decreasing, since the instantaneous density at time **B'** is too high. This would drive the density even lower by time **C'**.

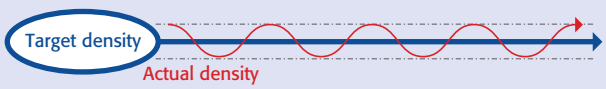
Ink density management with TrueFit Advance

TrueFit Advance's color management differs greatly from manual operation of traditional ink density management, which involves arbitrary timing of density measurement and relies on the intuition of the operator. TrueFit Advance monitors the ink and dampening solution levels regularly and in real time, while taking into account the historical measurements to evaluate trends over time. This assures the appropriate timing for adjustments and results in highly accurate and consistent ink density control.

Traditional ink density management



Ink density management with TrueFit Advance



As simple as a network printer

Guaranteed results with 1-bit TIFF

The TruePress 344 is independent of the upfront workflow as it accepts 1-bit TIFFs as input data. 1-bit TIFF data is ideal for four color printing separations, since it assures that output will match the intent of the designer, right down to the fonts and image resolution.

Compatible with the reliable Trueflow system

Screen's Trueflow, which has received rave reviews for its CTP workflow, has recently introduced a new entry-level model; Trueflow Rite. In addition to handling the latest PDF files, Trueflow Rite can output 1-bit TIFF, making it the ideal RIP for a workflow that includes the TruePress 344. Of course, any other RIP that creates 1-bit TIFFs can be used with the TruePress 344 as well.

Increased efficiency with JDF

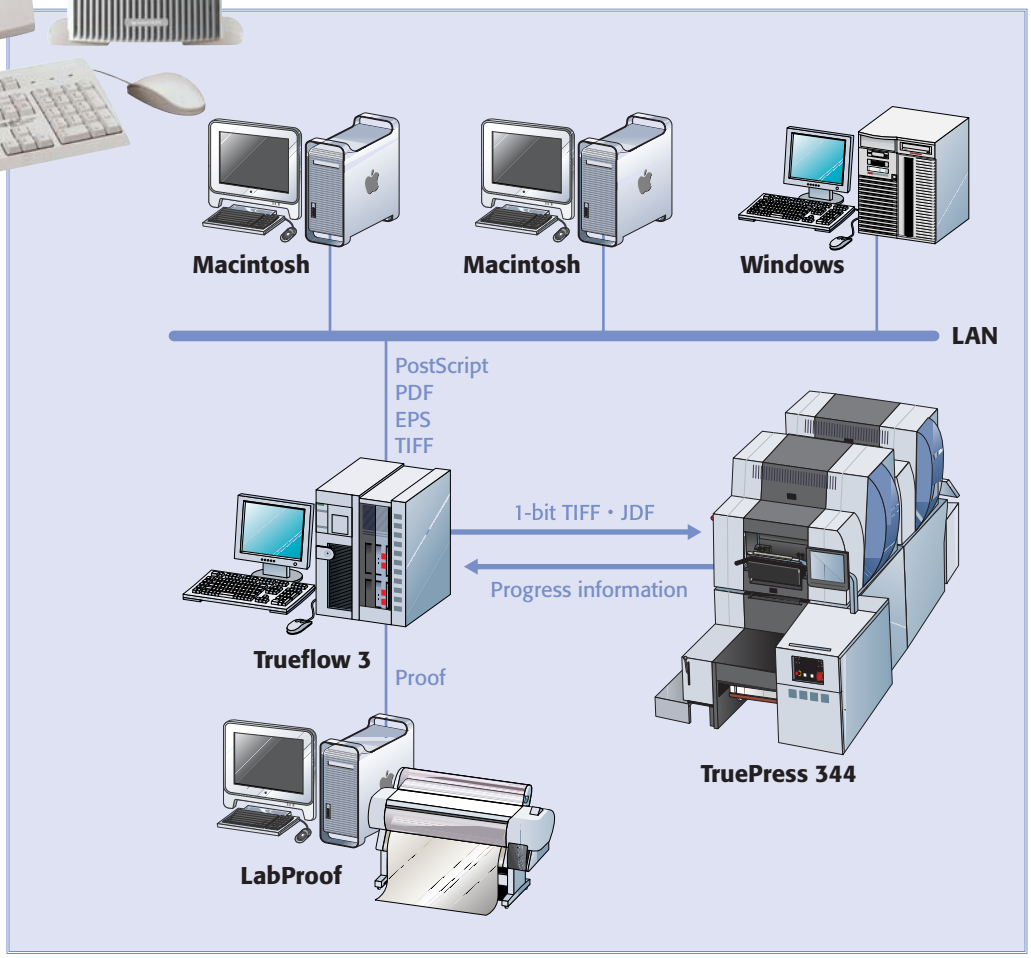
JDF is also supported in the TruePress 344 workflow. JDF is a format that allows various instructions related to a printing job to be transmitted to the appropriate processes. JDF data can be used to reduce print setup times and paper spoilage

Options

The TruePress 344 can be equipped with several optional systems that increase productivity and quality.

Screening: Spekta AM/FM hybrid screening is a widely acclaimed quality screening that produces outstanding quality. As a key element of Screen's success in Computer to Plate technology Spekta offers TruePress 344 users this unique screening to provide even higher quality results (will be supported in the future).

IR drying unit: Fitted with an inline IR dryer unit, the TruePress344 can attain a faster turnaround time for verso printing or finishing. Depending on the type of substrate or ink coverage the IR dryer can be a key asset in providing an on-demand service.



The ideal solution for your business

The TruePress 344 has a wide appeal for a variety of printing segments.

1. For Instant print shops

Instant print shops use a variety of digital printing presses, with toner-based technologies offering varying degrees of quality and functionality. TruePress344 is the ideal compliment to expand the range of production tools in bringing offset quality, flexible paper handling and low job cost at the higher run lengths.

Offering enhanced levels of quality at an affordable price is a key advantage in expanding your business.

2. For in-plant service bureaus

In-plant services at large companies utilize a wide range of print production equipment to meet the wide variety of in house document requirements. As the demand for 4-color printing increases they require fast economical production equipment, products with an ease of use that enable their workforce to be more effective and flexible.

With the high level of automation in the TruePress 344 most people are capable of producing high quality printed results after a short period of training.

3. For smaller print companies

There are many small print companies offering single and two color jobs. Stepping into 4-color quality printing is a consideration for many to expand their business. In looking at the options of different technologies and solutions, what should they choose.

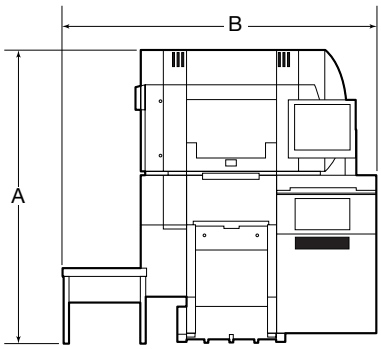
With the flexibility of printing in high quality offset, on a wide range of substrates at a low cost per job, the chances for success are far greater with the TruePress 344.

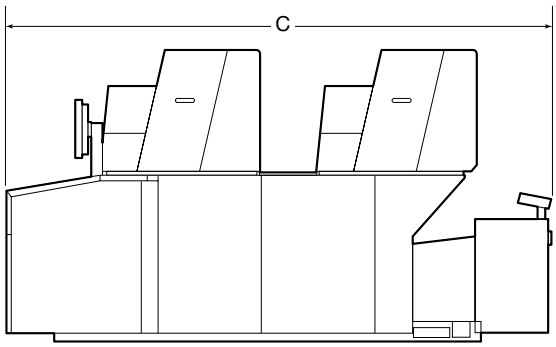
4. For large commercial printers

Most large printers do not have B3 size presses and tend to focus on jobs with a larger format size and longer print runs. However client companies have a wide range of print requirements, and being able to offer full service could be the key to holding on to the client. Commercial printers wanting to meet their clients print requirements in full can consider the TruePress 344 the ideal solution.

Adding the TruePress 344 as a production tool can enable the large format printer to expand his range of services and be confident that he has control and compatibility of quality and service. The TruePress 344 offers the user the peace of mind that no matter the quantity, it will deliver exceptional quality, cost and turnaround times.

Space requirements





Dimensions

	A	B	C
mm	1,920	2,030	3,853
in.	75.6	80.0	140.9

TruePress 344 specifications

Light source	MALD (Multi Array Laser Diode)
Plate	Processless thermal plates
Printing area	Max. 330 x 460 mm (13.0" x 18.1")
Paper stock size	90 x 148 mm (3.5" to 5.8") to 340 x 470 mm (13.4" x 18.5")
Paper stock thickness *	0.05 mm to 0.3 mm (can print envelopes)
Max. printing speed	Up to 7,000 sheets/hour
Automatic functions	Ink key control, inline density detection and output function (TrueFit Advance), dampening solution level controls, printing pressure adjustment, plate loading/unloading, blanket cleaning, ink roller cleaning, dampening solution roller cleaning, paper presets, paper registration
Oil supply	Concentrated oil (manual pump up)
Dimensions (W x D x H)**	2,030 x 3,580 x 1,920 mm (80.0" x 140.9" x 75.6")
Weight	6,000 kg (13,228 lbs.)
Power requirements	Three phase 200 to 220 V, 30 A, 7.5 kW
Heat production	25 kJ (6,000 kcal)
Options	Dampening solution circulation system (required option), RIP, compressor, IR drying unit, push side guide registration unit

* The paper thickness that can be handled may vary with printing conditions, environment, ink, and paper type.
** 1,000 mm clearance around the unit, and 400 mm clearance above it, is required for the placement of optional systems and for maintenance purposes.

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 DSDD 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 (NEDERLAND) BV
• Bouwerij 46, 1185XX Amstelveen, Holland/Phone 020-4567800/Fax 020-4567805 www.screeneurope.com
SCREEN FRANCE
• Z.I. Paris Nord II, 12 Rue des Chardonnerets, B.P. 50315, F-95940 ROISSY C.D.G. Cedex, France/Phone 1-48-17-86-00/Fax 1-48-17-86-01
DAINIPPON SCREEN SINGAPORE PTE. LTD.
• 29, Kaki Bukit View, Kaki Bukit Techpark II, Singapore 415963/Phone 67493833/Fax 67499010 www.screensp.com.sg
DAINIPPON SCREEN (CHINA) LTD.
• 6th Floor, 414 Kwun Tong Road, Kwun Tong, Kowloon, Hong Kong/Phone 2953-0038/Fax 2755-8683
Beijing office /Phone 010-6708-9271, 9272, 9273/Fax 010-6505-4975 (China)
Shanghai office /Phone 021-6466-4501/Fax 021-6466-4503 (China)
Guangzhou office/Phone 020-3891-1112/Fax 020-3891-1036 (China)
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.
• 8th Yonsei Bongnae B/D 48-3, 1Ga, Bongnae-Dong, Joong-Gu, Seoul 100-161, Korea/Phone 02-7766-786/Fax 02-7766-787
DAINIPPON SCREEN (AUSTRALIA) PTY. LTD.
• Unit 2, 207-209 Young Street, Waterloo, NSW 2017, Australia/Phone 02-9310-1314/Fax 02-9310-3566

Internet web site: www.screeneurope.com

• This brochure was made using SPEKTA screening.
• Printed on recycled paper.

No.205-083E Printed in Japan 03-04 10FSM(R0-0)