SCREEN
MEDIA TECHNOLOGY

Spekta 2

AM/FM hybrid screening

Spekta 2 screening combines the best qualities of AM and FM screening and makes it easy to get high-end printing quality with existing printing technology.

Spekta, Dainippon Screen's hybrid screening, combines the best of AM and FM screening. It eliminates the moiré and broken lines associated with AM screening and increases color saturation. It is also very highly regarded among today's demanding customers.

Spekta 2 is the next generation of Screen's Spekta hybrid screening. It offers all the terrific qualities users have come to expect from the first generation of Spekta, while making it even easier to print. Featuring a larger minimum dot size, Spekta 2 offers printing stability similar to that of a 175 lpi, 2400 dpi printing environment. What's more, its high-level algorithms optimize the screening forms and orientation for each CMYK separation, and reduce granularity.

Spekta 2 makes it easy to produce high-end printing quality output with existing equipment. It is suitable for a wide range of uses, making it ideal for businesses interested in pursuing new business opportunities.

Note the wood grain of the mask and the details in the cloth, as well as the absence of broken lines in the mask's eyebrows and beard. The reproduction of the gold leaf in the fan and color saturation throughout are remarkable as well.

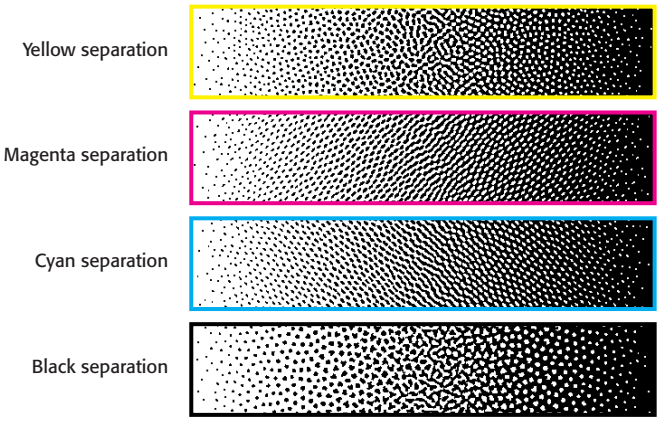
High-level algorithms for easier, higher quality printing, and next-generation CTP support

High-end printing quality reproduction

Reproducing fine details with high-frequency screening has always required a relatively high-end printing setup. With Spekta 2, you get that same level of quality and detail, in a printing environment that is as easy to use as a conventional 175 lpi, 2400 dpi printing environment.

Better printing stability and less granularity

The smallest dot size exposed on plates by a 2400 dpi output device is 10.5 μm. Printing effectively from such a small dot size requires high-end printing equipment and technique. Spekta 2's smallest dot size is 21 μm (equivalent to a 2% halftone dot at 175 lpi), which makes it much easier to maintain printing stability. In addition, Spekta 2 reduces the granularity that tends to arise as dot sizes increase, by optimizing the screening forms and orientation for each separation.



Preventing moiré

Since the dots are placed randomly, like in FM screening, there is no need to adjust the screening angles. With Spekta 2, even images that tend to have plate alignment and image interference patterns—such as cloth, mesh screens on speakers, and photos of CRTs—produce no moiré. There is also no problem with rosette moiré in background gray and black areas.

Vivid color in the midtones

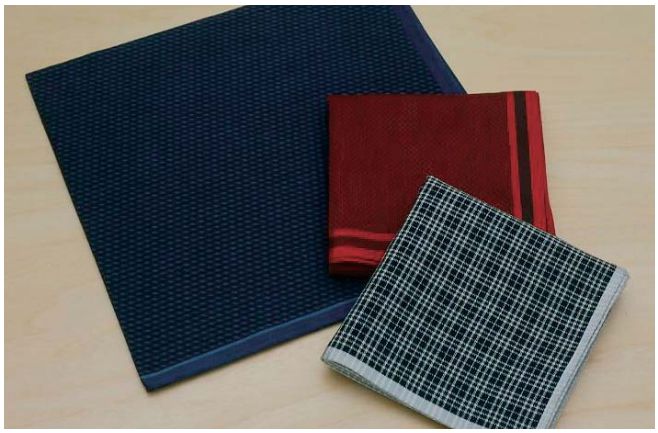
The reproduction of vivid, healthy looking skin tones. Images of fresh flowers, fruit, and gourmet food also boast better color saturation. Spekta 2's beautiful and vivid color reproduction makes everything look better.

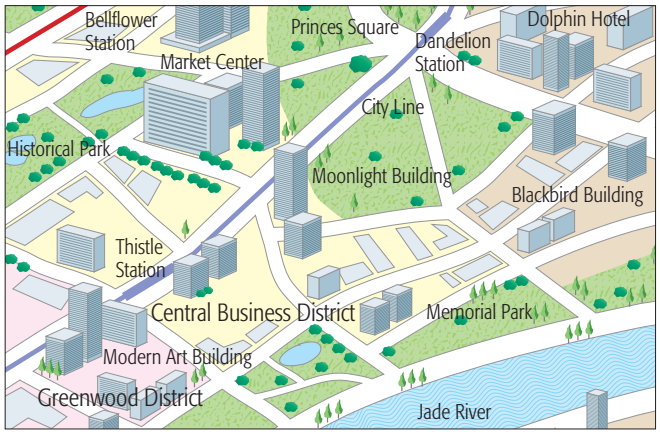
No broken lines, and better reproduction of details

With Spekta 2, the reproduction of the lines in maps, floor plans, and line illustrations is superior. With conventional screening, it is sometimes necessary to resort to the use of spot colors to prevent jaggies in lines created using halftone dots, when printing at 175 lpi. With Spekta 2, reproduction of all four colors is sharp, even in those areas where dots overlap—including tints. The reproduction of hair, lace, and other images featuring fine detail is extremely clear as well.

Great productivity and quality

Since printing stability is very high, Spekta 2 supports the same levels of productivity as conventional printing, without any sacrifice in quality. What's more, lower halftone dot percentages can be used for the midtones, since overall color density is increased through optical dot gain. This means that less ink is required, which has a variety of benefits, including shorter drying times.





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, 1185 XX 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.screen.co.jp
www.screenusa.com www.screeneurope.com

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