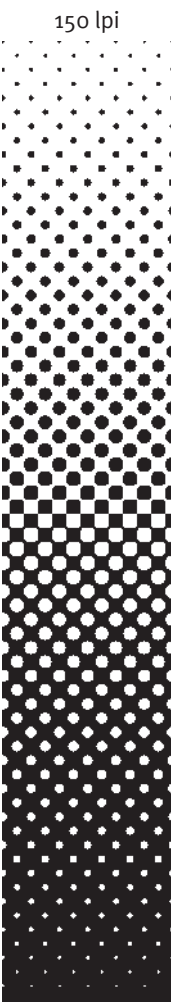
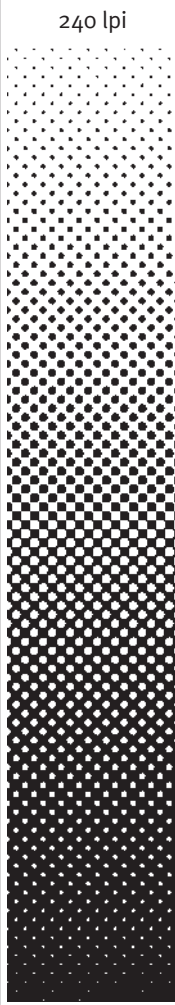
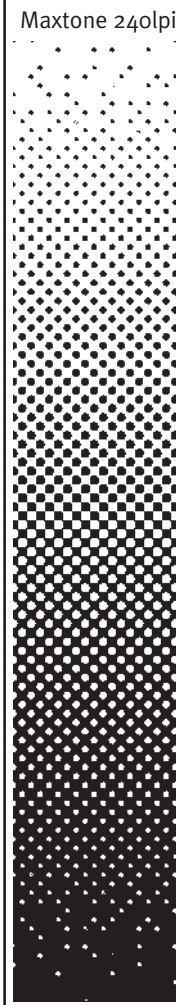
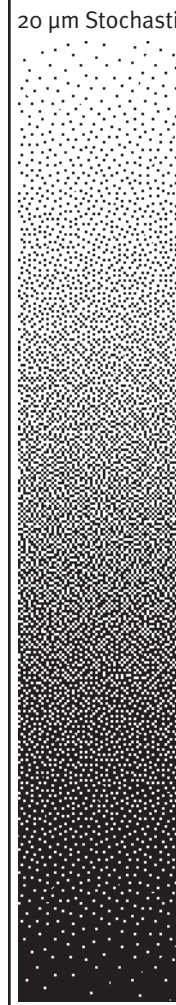
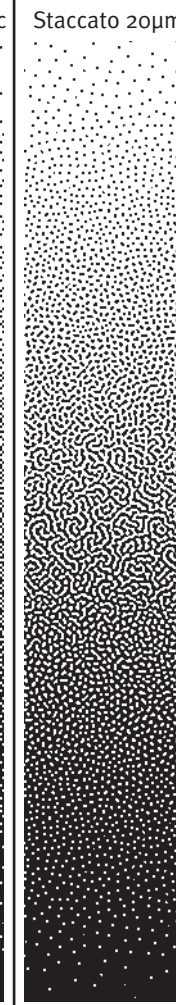
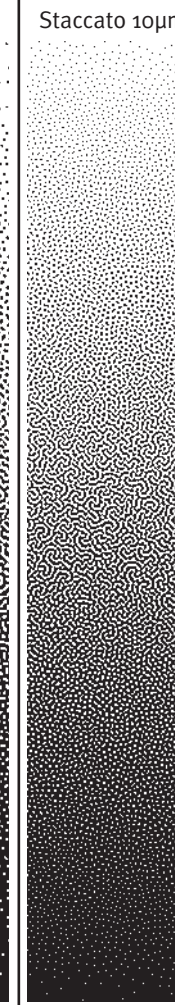
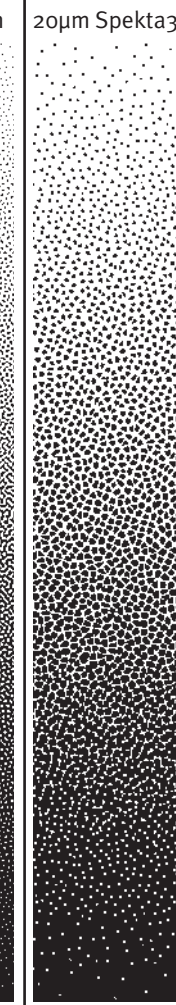


## Kodak Screening Technology Summary, Print 2005

High lpi AM/XM screens and fine FM screens require high resolution imaging, stable plates and tight process control to minimize dot variation. Kodak SQUAREspot™ imaging uses a 10,000 dpi laser to expose each 2400 dpi pixel. This delivers the highest halftone edge definition in CTP – making fine AM/XM and FM screens stable and practical for everyday use.

AM Screening Technologies			FM Screening Technologies			
Low lpi	High lpi supercell	High lpi Hybrid AM/XM	1 <sup>st</sup> order FM, Stochastic	2 <sup>nd</sup> order FM, Hybrid FM	2 <sup>nd</sup> order FM, 10 micron	Other Hybrid AM/FM
Low fidelity risk of moiré	Needs Hires laser & stable press, risk of moiré	Hires laser & stable press, moiré, grainy highlights	Hires laser & stable press, grainy mid-tones	Hires laser & stable press, smoother	Very Hires laser & stable press, near photographic	Hires laser & stable press, grainy with patterns
150 lpi	240 lpi	Maxtone 240lpi	20 µm Stochastic	Staccato 20µm	Staccato 10µm	20µm Spektazoo
						
Kodak	TSP & Prinergy	450 lpi	Maxtone 450 lpi	Staccato 20.1	Staccato 20-40	Staccato 10
Agfa	ABS <200 lpi	ABS <200 lpi	Sublima <340 lpi	CristalRaster		
Screen			Randot	RandotX (=HDS)		Spekta=Fairdot
Fuji	FFQS	CoRes		Taffeta (≈HDS)		
Rampage		Liso	Segundo			
HDM	HQS/IS		Diamond I&II	Satin (=HDS)		
AWS	CQS	Paragon	Quantum Hybrid	Rectangular	Organic (≈HDS)	
Esko		Highline	Samba Flex	Monet		
Hqn	HPS	HPS	HMS	HDS-superfine	HDS-coarse	HDS-fine

## How imaging resolution and screening impact stability

Finer screens (FM and AM) are more susceptible to imaging variation. High resolution lasers reduce variations in dot area while improving uniformity of exposure.

Measured dot area variations for $\pm 10\%$ variation in plate making	dot size ( $\pm$ microns)	150 lpi (50% $\pm$ %)	300 lpi, Staccato 25 (50% $\pm$ %)	500 lpi, Staccato 20 (50% $\pm$ %)	600 lpi, Staccato 10 (50% $\pm$ %)
SQUAREspot	$\pm 0.31 \mu\text{m}$	$\pm 0.25\%$	$\pm 0.75\%$	$\pm 1.0\%$	$\pm 1.5\%$
GLV (3x more variation)*	$\pm 1.4 \mu\text{m}$	$\pm 0.75\%$	$\pm 2.0\%$	$\pm 3.0\%$	$\pm 4.0\%$
Gaussian (5.5x more variation)*	$\pm 1.73 \mu\text{m}$	$\pm 1.5\%$	$\pm 4.0\%$	$\pm 5.0\%$	$\pm 8.0\%$

\* throughput for fine screens may be restricted with GLV and Gaussian imaging technologies to keep exposure uniformity and process stability within acceptable tolerances.

## Key Staccato Professional Service Offerings, by Market Segment

Staccato is being used successfully in over 1000 sites.

Fine AM and FM screens require a disciplined approach to print manufacturing and process control. Kodak's pressroom Staccato implementation knowledge and training programs, proven in over 400 projects, will help shorten learning cycle and implementation costs.

Staccato software tools put implementation skills in the hands of printers and help ensure success in day-to-day print production.

Segment	We suggest ...	Mfg Benefits & Differentiation		Service Offerings
Sheetfed	Staccato 10, 20, 25	<ul style="list-style-type: none"> <li>• faster make-ready</li> <li>• dries faster</li> <li>• faster turn-around</li> <li>• spot color simulation</li> </ul>	<ul style="list-style-type: none"> <li>• photographic quality</li> <li>• photographic detail</li> <li>• larger gamut</li> <li>• eliminates moiré</li> </ul>	<ul style="list-style-type: none"> <li>• Staccato Optimization for Sheetfed</li> <li>• Staccato On-Site Calibration Workshop</li> </ul>
Packaging Offset	Staccato 20	<ul style="list-style-type: none"> <li>• better ink mileage</li> <li>• more stable tone/color</li> <li>• less issues w/ registration</li> <li>• good on most substrates</li> <li>• spot color simulation</li> </ul>	<ul style="list-style-type: none"> <li>• more consistent color</li> <li>• photographic detail</li> <li>• eliminates moiré</li> <li>• sharp knockouts</li> <li>• fine type &amp; detail</li> </ul>	<ul style="list-style-type: none"> <li>• Staccato Optimization</li> <li>• Staccato On-Site Calibration Workshop</li> <li>• Spotless Quick Start</li> </ul>
Web (heatset)	St20 commercial St25 pubs/catalog St36 insert St36 directory	<ul style="list-style-type: none"> <li>• better ink mileage</li> <li>• more stable tone/color</li> <li>• less issues w/registration</li> <li>• spot color simulation</li> </ul>	<ul style="list-style-type: none"> <li>• photographic quality</li> <li>• eliminates moiré</li> <li>• sharp knockouts</li> <li>• fine detail</li> </ul>	<ul style="list-style-type: none"> <li>• Staccato Optimization for Web</li> <li>• Staccato On-Site Calibration Workshop</li> </ul>
Newspaper (coldset)	St25 commercial St36 news	<ul style="list-style-type: none"> <li>• better ink mileage</li> <li>• faster make-ready</li> <li>• less issues w/ registration</li> <li>• spot color simulation</li> </ul>	<ul style="list-style-type: none"> <li>• high res quality</li> <li>• high res detail</li> <li>• eliminates moiré</li> <li>• larger gamut</li> </ul>	<ul style="list-style-type: none"> <li>• Staccato Optimization for Newspaper</li> <li>• Staccato On-Site Calibration Workshop for Newspaper</li> </ul>

# Kodak