

# Kodak VARIABLE MAINSCAN RESOLUTION SPECIFICATIONS

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<b>Product description</b>	<p>The Variable Mainscan Resolution (VMR) option lets you adjust the pixel resolution of the Kodak® platesetter in the mainscan (around-drum) direction in order to align the pixel boundaries to the frequency of the lenticular lens boundaries. VMR enables lenticular printers to produce high-quality products by combining accurate registration capabilities with the Kodak SQUAREspot® thermal imaging technology of Kodak platesetters.</p>
<b>Features and benefits</b>	<ul style="list-style-type: none"><li>• Changes the pixel resolution of the device in the mainscan (around-drum) direction</li><li>• Makes fine adjustments (<math>\pm 3.2\%</math>) by stretching or shrinking the pixel size to fit minor variations in the lens frequency</li><li>• Enables mainscan (around-drum) resolutions from 1200 dpi up to 4800 dpi on a 2400 dpi head (or 1270 dpi up to 5080 dpi on a 2540 dpi head)</li></ul>
<b>Prerequisites</b>	<ul style="list-style-type: none"><li>• Any of the following Kodak platesetters:<ul style="list-style-type: none"><li>• Trendsetter® 3230/3244 or Trendsetter 400/800 Quantum™</li><li>• Trendsetter 400/800 II Quantum</li><li>• Trendsetter 400/800 III Quantum</li><li>• Trendsetter VLF Quantum</li><li>• Magnus™ 800 Quantum</li><li>• Magnus VLF Quantum</li></ul></li><li>• A Kodak-approved workstation (contact sales representative for workstation options)</li><li>• A workflow system that is capable of creating files with asymmetric resolutions (different resolutions in the mainscan and subscan direction), such as Kodak Prinergy®, Kodak Prinergy Evo™, and Kodak Brisque® workflow products</li><li>• Plating media that support the high line-screen requirements of the lenticular job. For a list of qualified media, see the individual media specifications .</li></ul>
<b>Components</b>	<ul style="list-style-type: none"><li>• Variable Mainscan Resolution software</li><li>• License key for Variable Mainscan Resolution</li></ul>
<b>Options</b>	<ul style="list-style-type: none"><li>• VMR96—Allows mainscan resolution up to 9600 dpi on 2400 dpi head (or 10160 dpi on 2540 dpi head)—available on Trendsetter 400/800 II, Trendsetter 400/800 III, and Magnus VLF devices only</li></ul>

**Input**

- File formats
- 1-bit TIFF files with mainscan resolution within the licensed limit and subscan resolution of 2400 or 2540 dpi (for indirect TIFF connectivity)
  - 8-bit interlaced image files that are compatible with Prinergy, Prinergy Evo, or Brisque workflow system (for direct workflow-to-device connectivity)

**Output**

- Resolution
- On devices with a 2400 dpi head:
    - 1200–4800 (or 9600) dpi in mainscan (around-drum) direction
    - 2400 dpi in subscan (along-drum) direction
  - On devices with a 2540 dpi head:
    - 1270–5080 (or 10160) dpi in mainscan (around-drum) direction
    - 2540 dpi in subscan (along-drum) direction
  - Fine adjustment in the mainscan direction up to  $\pm 3.2\%$  of the image file resolution
  - Maximum line screen: 450 lpi or Kodak Staccato<sup>®</sup> 10 screening<sup>1</sup>

**Limitations**

- Imaging speed
- Depending on the image resolution, the imaging speed on jobs using the VMR option might be reduced to the standard imaging speed of the device, regardless of the speed option. For details, refer to the media performance database.
- Staccato FM screening
- VMR is limited to 2400 dpi  $\pm 3.2\%$  because Staccato does not support asymmetric resolution.
- Spectrum halftone proofing
- Output resolution is limited to 2400 dpi  $\pm 3.2\%$  due to proofing media limitation.
- Image orientation
- The interlaced image strips (or lenticular lens) must run across the drum. As a result, jobs may have to be rotated 90 degrees to image properly.
- Due to this restriction:
- The unexposed clamp margin on a positive plate media may get printed on the press sheet.
  - The online punching option on some of the output devices may not be useable.
  - The maximum plate size that can be imaged on the output device may be limited.

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1. The maximum supported line screen is media-dependent. Consult your Kodak representative for the current media qualification list.