

- **Flexography**

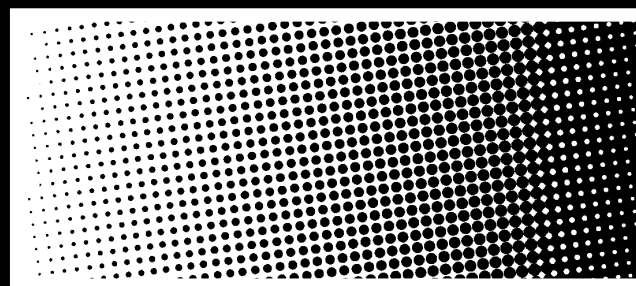
For flexography, Agfa has developed a set of Balanced Screens with a perfect round dot shape over the complete tone range. The set is available for conventional screen angles as well as screen angles rotated over 7.5°. Shifted angles prevent conflicts with certain engraved anilox roller patterns. The special round dot shape eliminates typical mid-tone tone jumps where dots start to touch. In addition, Agfa introduces the FlexoScale, a powerful software utility to compensate for the stretching of flexible printing plates on the press cylinder. The flexo screens cover a range from 35 to 250 lpi at 1200-3600 dpi imaging resolution.

- **Conversion Gravure**

The conversion gravure set consist of a series of Balanced Screens that combine the conventional round and elliptical dot shapes with screen angles rotated over 7.5°. Such screens are typically used in conversion gravure, where the geometry of film scanning and cylinder engraving can interfere with normal screen angles. Furthermore, these screens are invaluable for page fax applications as well as any offset printing job where the image contains horizontal and/or vertical lines and patterns causing interference with the traditional screen angles. The conversion gravure screens come in a range from 65 to 300 lpi at 1200-3600 dpi imaging resolutions.

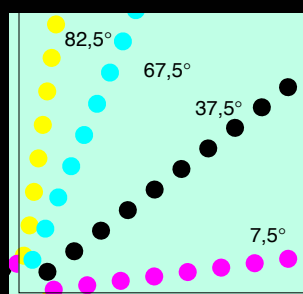
- **Special Offset Applications (Y60/Y30)**

Although Agfa Balanced Screening already compensates for yellow moiré, some printers prefer a screen set with the yellow separation angled at 60° or 30° instead of 90°. The ABS Options package offers special sets called “Y60 and Y30 screens” to maintain consistently high output quality of Agfa Balanced Screening for precisely those situations. These provide an even greater control when reproducing images with a dominance of colors sensitive to yellow moiré, e.g. skin tones and yellow/orange tints. The Y60/Y30 screens are available between 65 to 250 lpi at 1200-3600 dpi imaging resolutions.

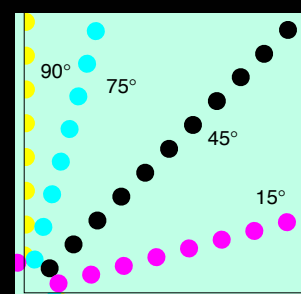


Perfect round dot shape over complete tone range

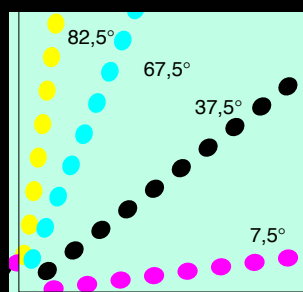
(110 lpi screen at 2400 dpi, 8 x enlarged)



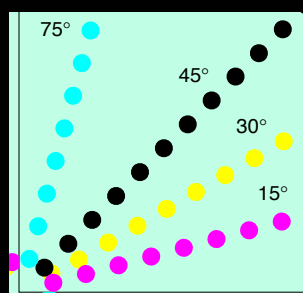
Flexo screens
rotated angles



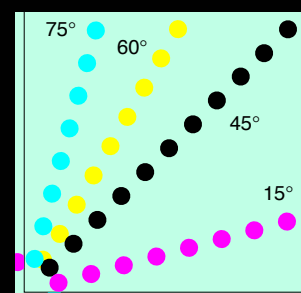
Flexo screens
conventional angles



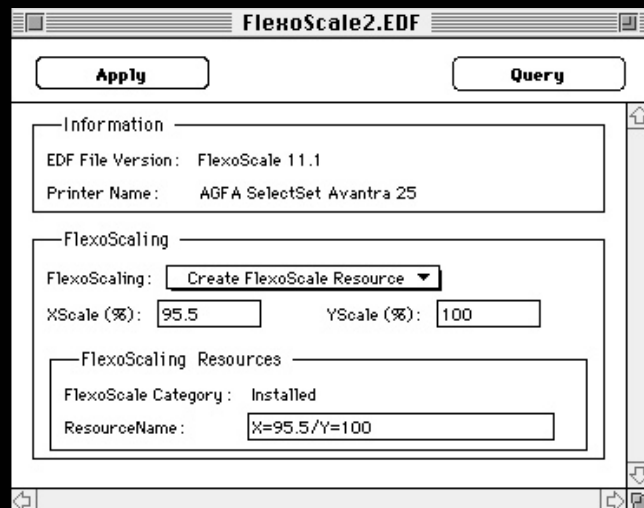
Conversion gravure screens
rotated angles



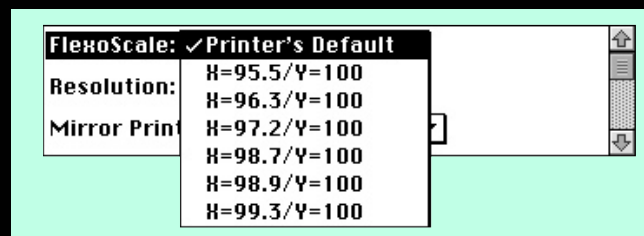
Y 30



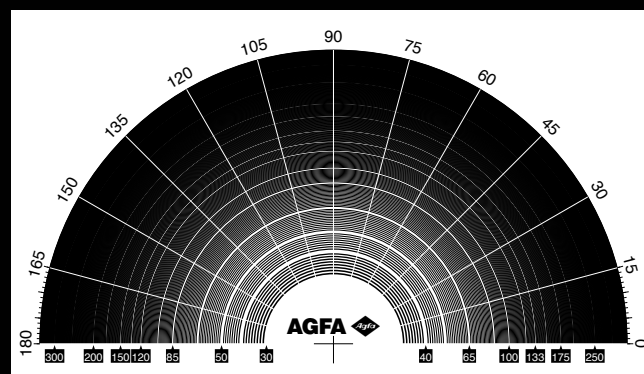
Y 60



FlexoScale tool



FlexoScale Extended PPD settings



ABS Zone plate tool

• Professional tools

The Agfa Balanced Screening Options Kit comes with a complete set of tools to deal with specific screening related issues.

The FlexoScale tool allows the user to distort the imaged pages for the Y- or the X-axis. It compensates for factors such as type of plate construction, plate thickness, plate surface stretch etc. The user can attach specific distortion values to print queues or select the distortion at print time on a job by job basis.

With the FlexoScale Tool, the user can name and download specific scaling settings into PostScript Resource files. At print time, the user has the option to apply these different scaling parameters to individual jobs from within the standard print dialog.

The ABS Zone Plate is a file output on photographic film, allowing the user to easily measure the frequency and/or the angle of any halftone screen. The Zone Plate Orientation tool is a PostScript file the user can output to define the X and Y orientation of the imagesetter being used. A very helpful, user-oriented tool for any screen angle-critical job.

The complete picture

The Agfa Balanced Screening Options Kit is available as a separate option to any new or existing Agfa PostScript Level 2 hardware and software RIP. Agfa PS Companion v.1.1, the latest version of Agfa's PostScript tools for the control and calibration of Agfa RIPs and imagesetters, is included.

Combined with its Avantra and AccuSet imagesetters, the widest range of graphic arts films—including special items such as a matte imagesetter film for flexo applications—and processing solutions, Agfa offers the complete picture in professional PostScript prepress.



Screening for Flexo

- Completely round dot over full tone scale
- With conventional screen angles (C 75° - M 15° - Y 90° - K 45°)
- With screen angles rotated by 7.5° (C 67.5° - M 7.5° - Y 82.5° - K 37.5°)
- Comprehensive set of screen rulings:
 - 1200 dpi: 35, 40, 45, 50, 55, 60, 65, 75, 85, 100 lpi
 - 1800 dpi: 85, 100, 110 lpi
 - 2400 dpi: 85, 100, 110, 120, 133, 150, 175 lpi
 - 3000 dpi: 150, 175 lpi
 - 3600 dpi: 175, 200, 250 lpi

• Flexo Distortion Tool:

With Viper or hardware RIPs

- distortion can be selected in the extended print dialog window on a job by job basis from a range of customer defined distortion settings

With Taipan or Cobra

- distortion applies to specific print queues
- multiple "flexo distorted" queues, each with specific distortion settings, are supported.
- distortion can be selected in the extended print dialog window on a job by job basis from a range of customer defined distortion settings, overwriting the queue set up.

AGFA BALANCED SCREENING OPTIONS KIT 1.5

Screening for Conversion Gravure

- Traditional round or elliptical dot
- With screen angles rotated by 7.5° (C 67.5° - M 7.5° - Y 82.5° - K 37.5°)
- Comprehensive set of screen rulings:
 - 1200 dpi: 65, 75, 85, 100, 110, 120 lpi
 - 1800 dpi: 65, 75, 85, 100, 110, 120, 133, 150, 175 lpi
 - 2400 dpi: 85, 100, 110, 120, 133, 150, 175, 200 lpi
 - 3000 dpi: 133, 150, 175, 200 lpi
 - 3600 dpi: 133, 150, 175, 200, 250, 300 lpi

Special Offset Applications (Y60/Y30 Screens)

- Traditional round or elliptical dot
- With 60° screen angle for yellow, not the typical 90° (C 75°- M 15°- K 45°)
- With 30° screen angle for yellow, not the typical 90° (C 75°- M 15°- K 45°)
- Adequate set of screen rulings for Y60 and Y30:
 - 1200 dpi: 65, 75, 85, 100 lpi
 - 2400 dpi: 100, 110, 120, 133, 150, 175 lpi
 - 3600 dpi: 133, 150, 175, 200, 250 lpi

Options Kit content

The Agfa Balanced Screening options kit Version 1.5 is available for all Agfa PS Level 2 software and hardware RIPs and includes:

- the PS Companion 1.1 high quality PostScript tools, with AgfaSet 3.1.1 and Calibrator 4.0.1.
- the FlexoScale Tool
- extensive documentation

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AGFA BALANCED SCREENING

New professional PostScript screening technology

- Flexography
- Conversion gravure
- Special offset applications (Y60/Y30)



Options Kit 1.5

With its award-winning Balanced Screening technology, Agfa was the first vendor to provide high-end quality screening to the open PostScript desktop environment.

It combines several new techniques to improve the quality and overall performance of rational tangent screens. A new mathematical approach aimed at optimizing the interaction between the four screens, the use of supercells and an advanced dithering technique results in clear centered rosettes and the reduction of visual moiré patterns.

New generation of Balanced Screening Technology

For the first time in an open PostScript system environment, Agfa provides Balanced Screening technology for applications previously covered only by dedicated proprietary systems. With the Agfa Balanced Screening Options, Agfa introduces a second wave of the ABS technology.

The Options Kit includes halftone screens designed for flexography, conversion gravure and special offset printing applications. Each set of screens takes into account the requirements of these different printing applications to guarantee high quality output.

WHAT DO
YOU SEE?

AGFA 
The complete picture.