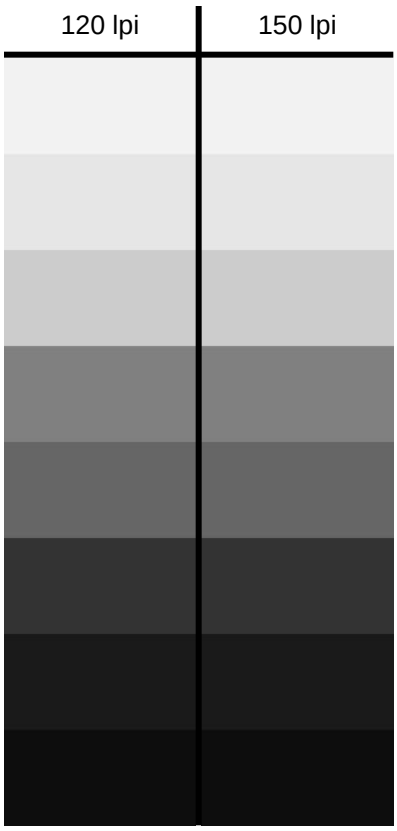
ABDICK® MEGAPRO® Optimum Exposure Test Pattern



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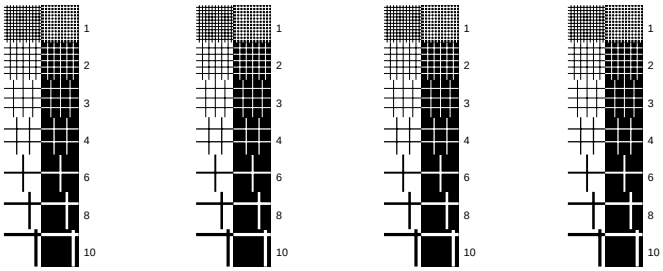
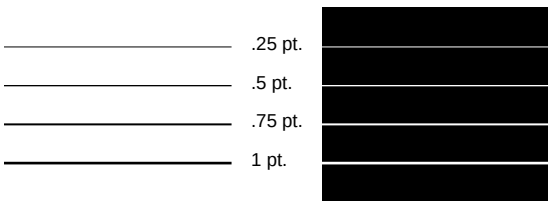
Negative/Positive Line (beam)





A.B.Dick MEGAPRO® Test Pattern

Material PCN: _____

Imagesetter: _____

Resolution: _____

Density: _____

Date: _____

ABDICK® MEGAPRO® - Setting Optimum Exposure

Underexposure causes reduction of water carrying properties on the plate. This may result in background toning, printing of horizontal lines and plugged halftone dots in the shadows. If a plate is **overexposed**, the image may look good, but run lengths may decrease and blinding can occur. Also, fine lines on overexposed plates become thinner and may break up when printed and highlight dots in halftones are dropped out.

Follow the steps below to determine and maintain correct exposure on MEGAPRO® digital polyester plate material.

Using MEGAPRO® Optimum Exposure Test Pattern

1. Output the digital file (MEGAPRO.ps or MEGAPRO.pdf) which consists of positive and negative thin lines to the imagesetter (Figure A).
2. Review "Negative/Positive Line (beam)" with 30x - 50x loupe*. Inspect the point at which the positive and negative lines meet. (Figure B). Optimum exposure is reached when the positive and negative thin lines are equal in width.
3. Increase or decrease exposure settings as necessary, then output and inspect the file again. Repeat procedure until optimum exposure is achieved. When the positive and negative bars are equal at target area, the material will produce the proper development of silver and emulsion. (Figure C).

*An inexpensive 30x loupe can be purchased from Radio Shack.

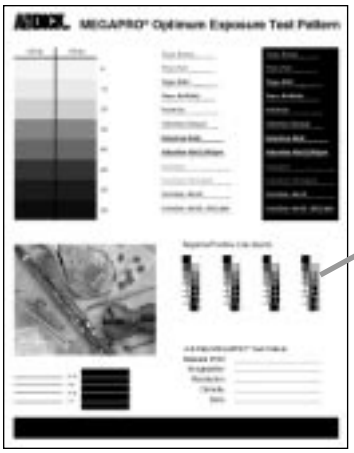


Figure A

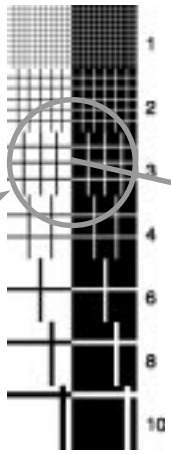


Figure B

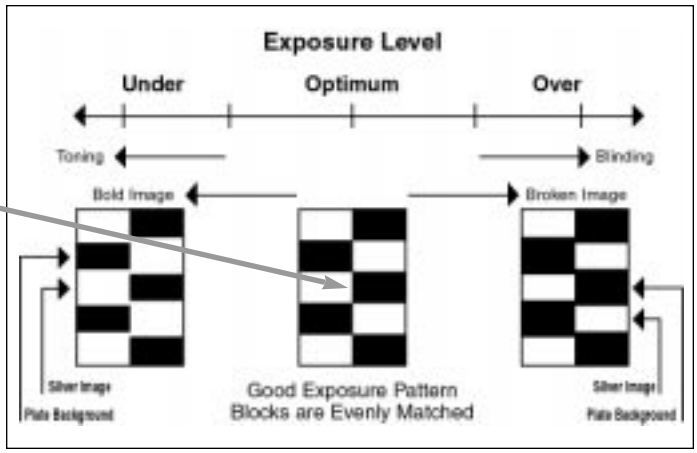


Figure C

Using a Densitometer to Set Exposure

An alternate method of exposure is with a reflective densitometer. By measuring the MEGAPRO plate background (emulsion), optimum exposure can be easily monitored. Use this information to maintain exposure on a day-to-day basis.

1. Expose MegaPro® polyester plate material to daylight for 1 to 2 minutes to find the maximum amount of light that the material will absorb (referred to as the density maximum or D-Max).
2. Process material under optimum conditions (i.e., proper pH levels). Activator should have a pH between 12.8 - 13.6 and stabilizer between 5.6 - 6.8.
3. Using a reflective densitometer, measure the background density of the daylight-exposed plate. This number represents the D-Max of the plate.
4. Subtract .06 from the value read. This new value represents the optimum density of the plate.
5. Output and process a polyester plate that has been exposed by the platesetter or imagesetter's laser light source.
6. Adjust the laser setting to reflect the optimum density (see example at right).

Sample Exposure

Maximum density reading (D-Max)	1.40
To reach optimum	- .06
Optimum density	1.34

Margin of error is +/- .01. In this example, a density reading of 1.33-1.35 would be appropriate as optimum density. Increase the laser intensity if the background is too low or not black enough. Decrease the laser intensity if the background is too dark or too black.