



Auraia-II Ink Savings Hamillroad Software, 2011



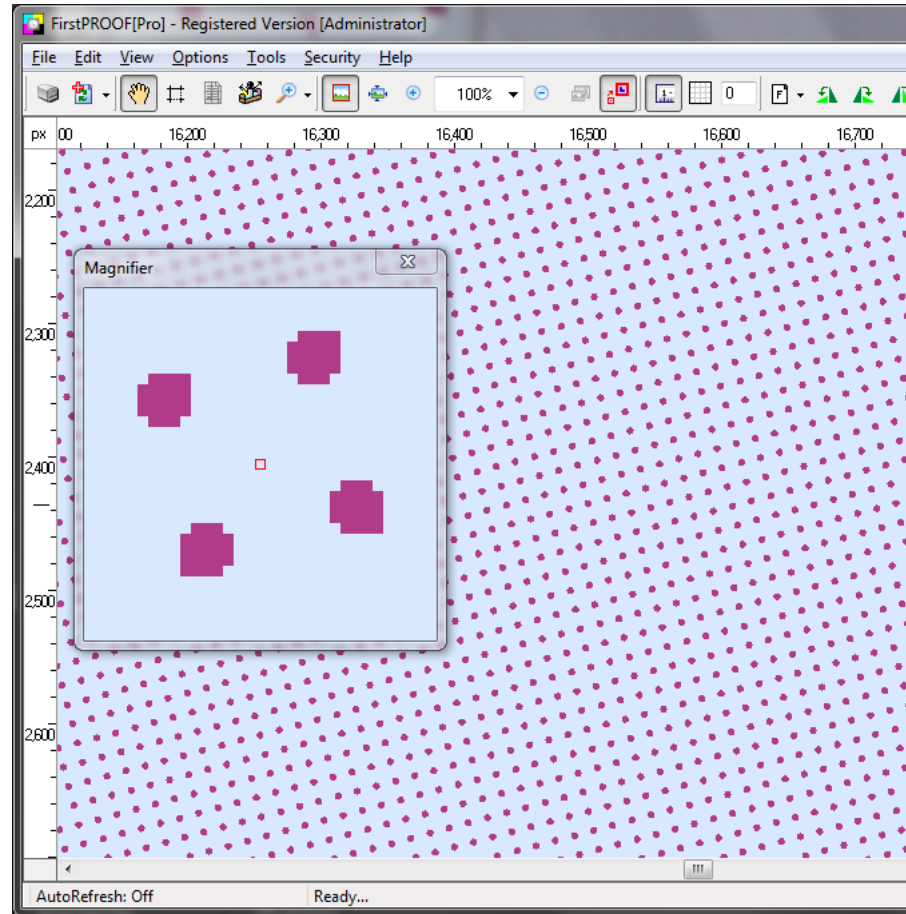
Ink savings with FM

- Proven in various studies that FM (stochastic) screening saves ink
- See <http://www.printing.org/page/8736>
Printing Industries of America - Graphic Arts Trade Association
Effect of AM Versus FM Screening on Ink Consumption on a Sheetfed Offset Lithographic Press
- See <http://qualityinprint.blogspot.com/search/label/ink%20saving>
Quality in Print Blog – Gordon Pritchard, former Print Quality Marketing Manager for 11 years at Creo/Kodak
Using FM Screening for ink savings
- FM screening can produce ink savings of up to 35%
- FM screening typically produces ink savings of 10-15%
- DM screening produces higher ink savings than FM



Dot Structure (AM)

Uses
Large(r)
Dots



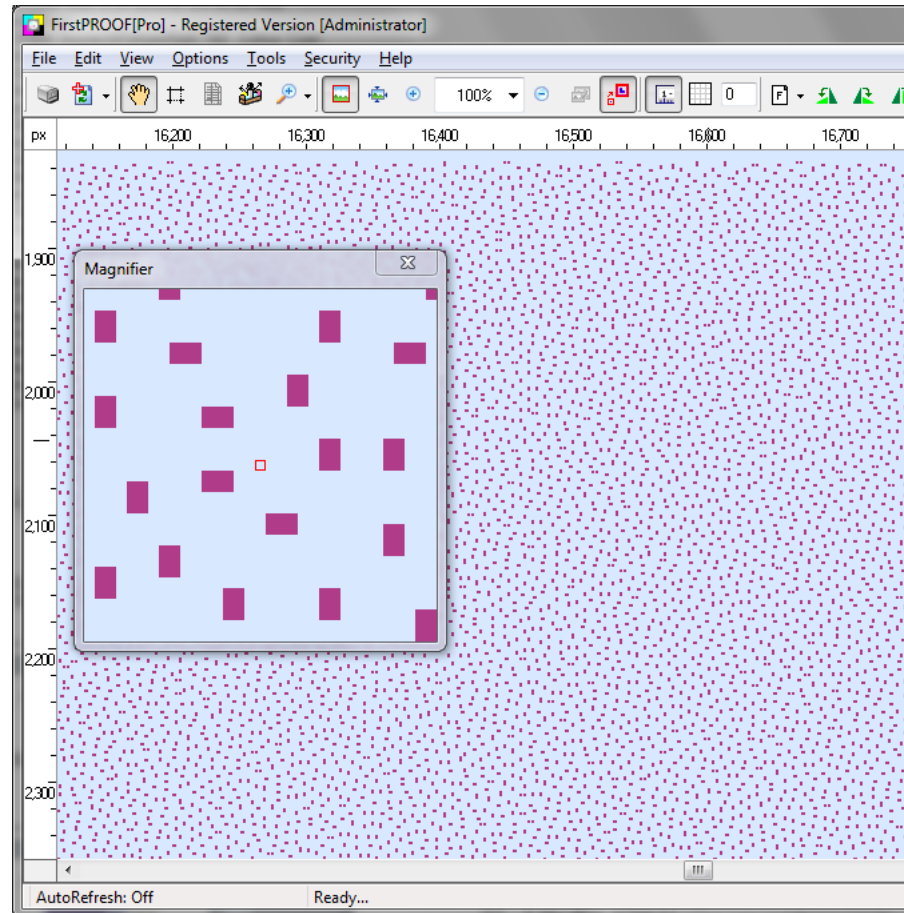
10% tint



Dot Structure (DM)

Uses
Small(er)
Dots

Smaller
Dots
Than FM

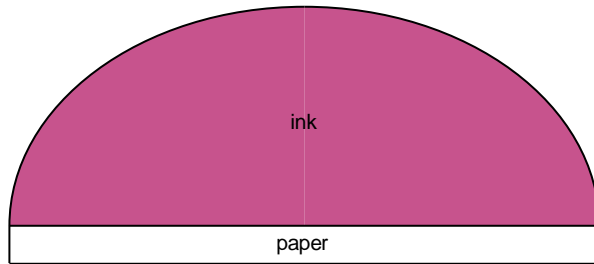


10% tint

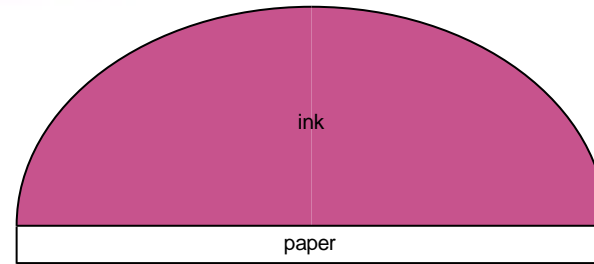


Ink Volume (AM)

10% tint:



Front view



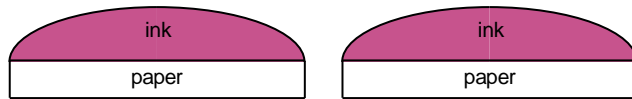
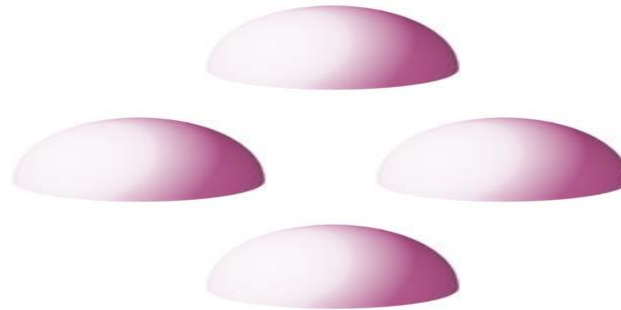
Side view

Large dots accumulate ink - large volumes of ink



Ink Volume (DM)

10% tint:



Front view

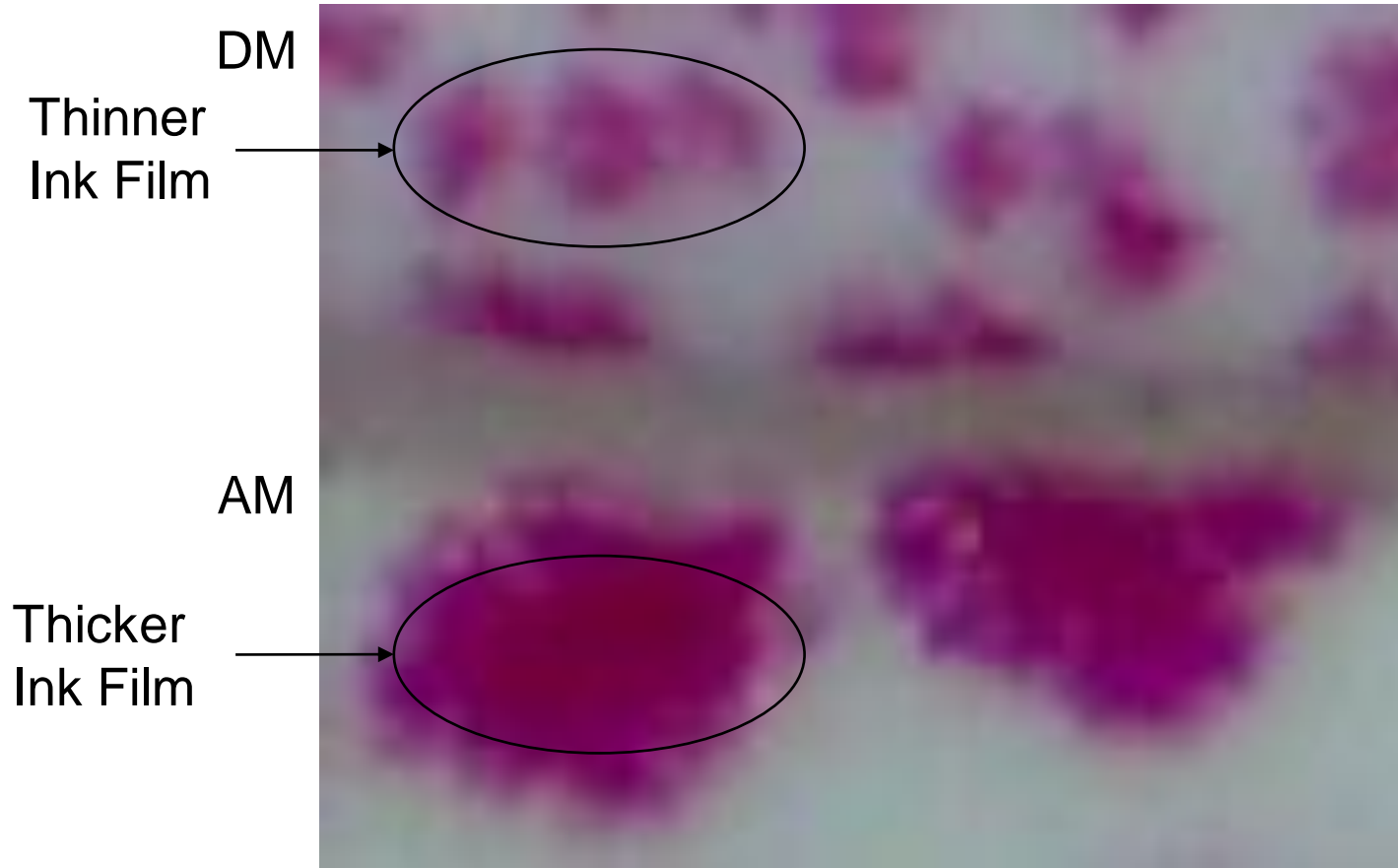


Side view

Smaller dots limit ink film thickness – small volumes of ink



Ink Thickness (AM vs DM)





Ink Saving (AM)

Magenta ink filters green wavelengths from white light

Filters 50% of light, aka 50% Magenta



Filters 50% of (50% of light), aka 75% Magenta



Requires >3.0 units of ink to produce 100% Magenta





Ink Saving (DM)

Magenta ink filters green wavelengths from white light

Filters 50% of light, aka 50% Magenta



Filters 50% of light, twice, aka 100% Magenta



Requires 2.0 units of ink to produce 100% Magenta





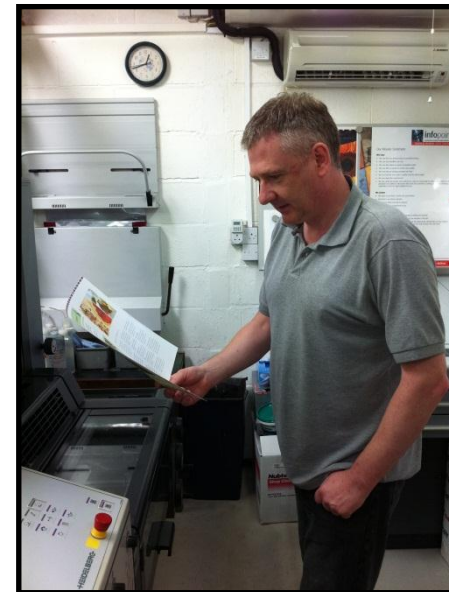
Cost Benefits (DM)

“We have stored ink profiles [ink duct settings] for jobs that were previously printed with conventional [200 lpi¹] halftone screens.

*Since changing to Auraia, I have been able to **reduce those ink profiles by between 15-20%**, whilst still maintaining solid ink densities.*

Needless to say, my M.D. was delighted to hear this, as it translates into real cost savings.”

– Rod Clark, Press Minder
Parkes Print Group



1. Given that a 175 lpi screen uses larger dots (than a 200 lpi screen), the ink savings of Auraia-II vs 175 lpi AM would be even higher.



Conclusion

- Auraia produces significant ink savings
- Auraia produces higher ink savings than FM screening
- Auraia produces ink savings with stable dots (easy to plate / print)
- Auraia saves money on ink when printing
- Auraia is the future for printers who want to increase profit

For further information, please contact auraia@hamillroad.com.