

hamillroad 

Transforming the image of print



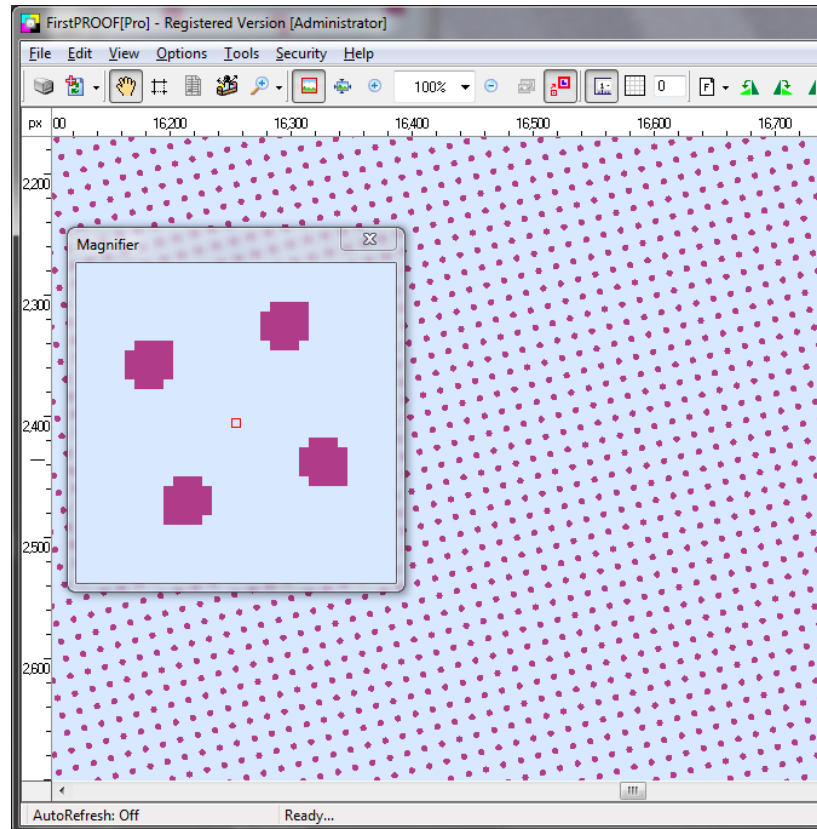
Auraia DM Screening

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 15%
- **DM screening can produce ink savings of up to 30%**
- FM screening typically produces ink savings of 3-4%
- **DM screening typically produces ink savings of 17-18%**

Dot Structure (AM)

Uses
Large(r)
Dots

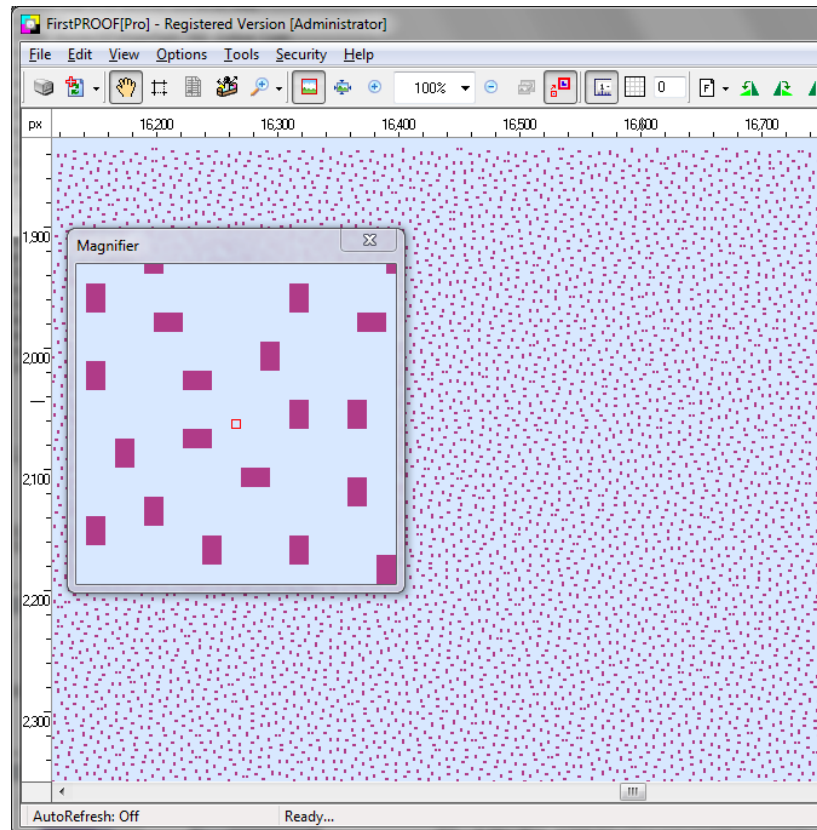


10% tint

Dot Structure (DM)

Uses
Small(er)
Dots

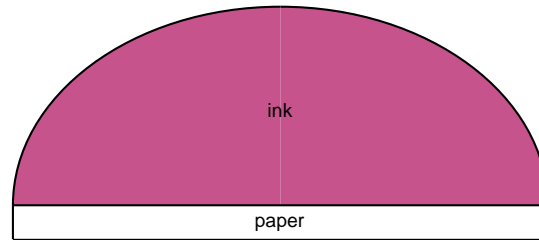
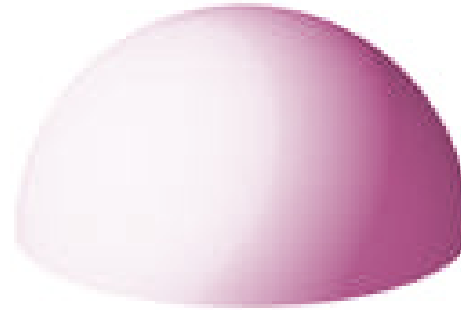
Smaller
Dots
Than AM



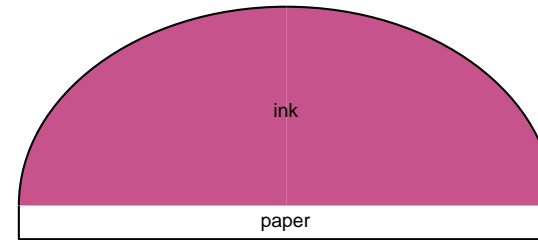
10% tint

Ink Volume (AM)

10% tint:



Front view

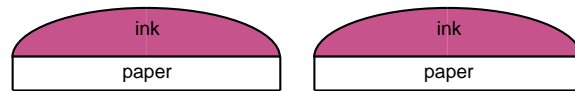
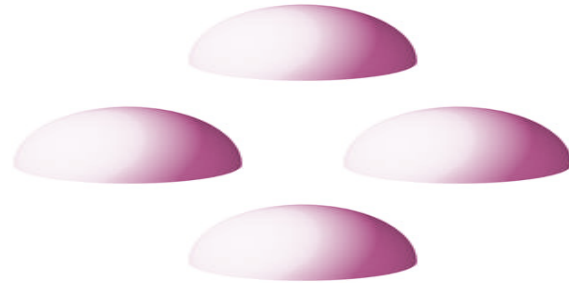


Side view

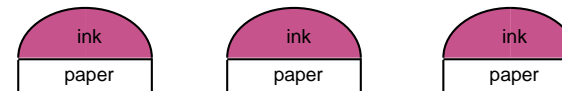
Large dots accumulate ink - large volumes of ink

Ink Volume (DM)

10% tint:



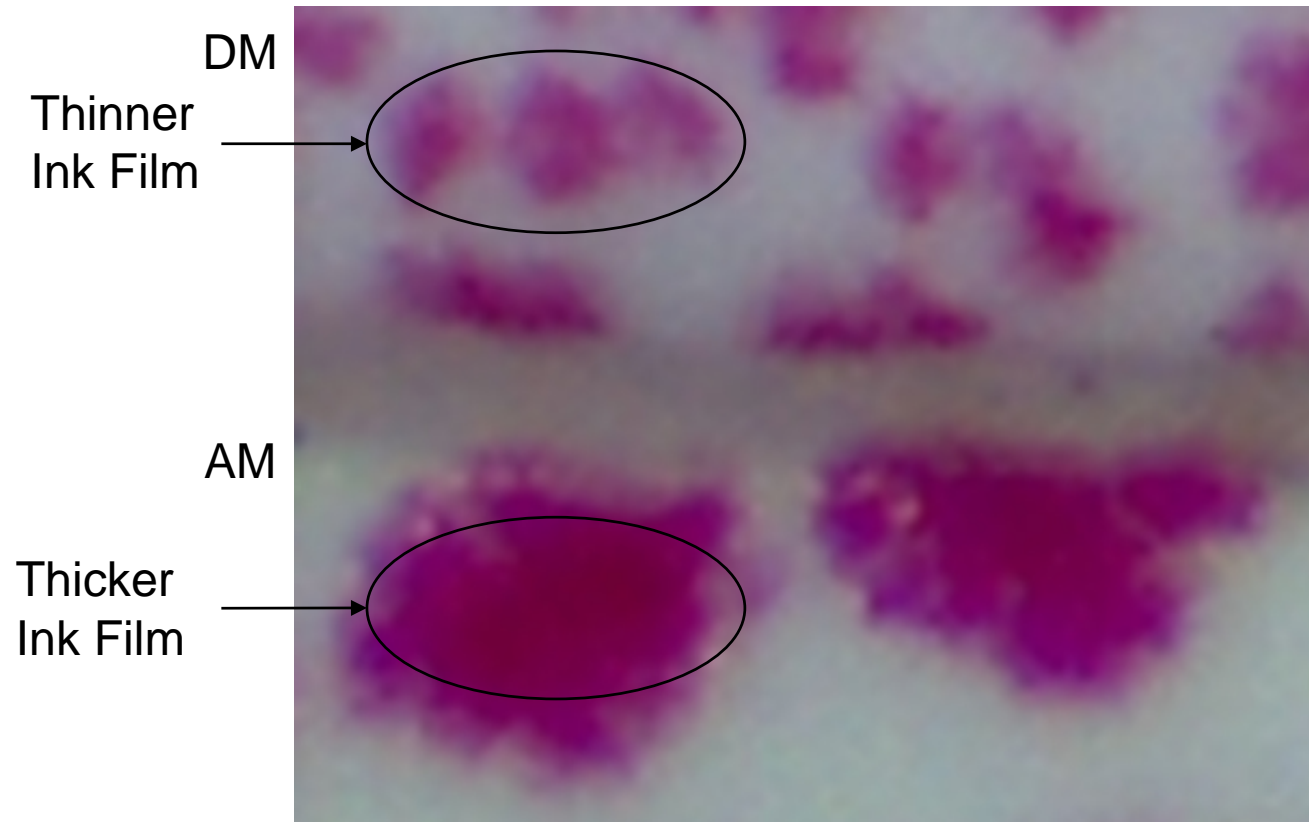
Front view



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

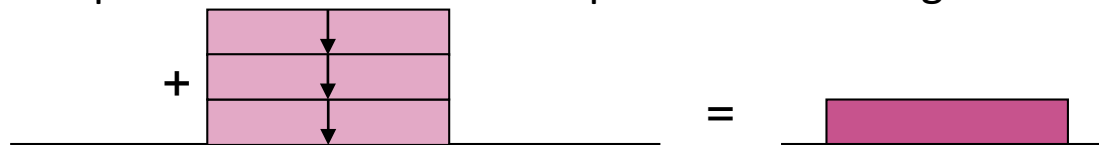
Filters 30% of light, aka 30% Magenta



Filters 30% of (remaining 70% of light), aka 51% Magenta



Requires >2.0 units of ink to produce 60% Magenta



Ink Saving (FM)

[HDS / Staccato / Randot X / Satin¹]

Magenta ink filters green wavelengths from white light

Filters 30% of red light, aka 30% Magenta



Between DM and AM, aka 55% Magenta



Requires >2.0 units of ink to produce 60% Magenta



1. HDS is a trademark of Global Graphics, Staccato is a trademark of Creo / Kodak, Randot X is a trademark of Screen, Satin is a trademark of Heidelberg.

Ink Saving (DM)

Magenta ink filters green wavelengths from white light

Filters 30% of light, aka 30% Magenta



Filters 30% of light, twice, aka 60% Magenta



Requires 2.0 units of ink to produce 60% 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



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, contact:
auraia@hamillroad.com