

## Ask the Technical Experts!

One of the benefits of membership is the technical expertise provided by Printing Industries of America. Our technical experts from the Center for Technology and Research discuss common production problems and issues. The Center for Technology and Research helps members with environmental, health, and safety concerns; consulting and on-site technical assistance; Technical Association of the Graphic Arts; and technology training.

Q. We are having problems with ink misting on our web press. I have heard ink misting can be related to ink length. What is ink length?

A. Ink length refers to the ability to pull a filament from a can of ink. If an ink is too long, this could cause ink misting on press and if too short, this may result in piling on the blanket. Excessive heat buildup in the ink rollers and emulsification of fountain solution can contribute to ink misting. Make sure the ink rollers are well maintained, set correctly to minimize heat buildup, and promote good ink water balance. Contact you ink supplier for their assistance. A new formulation of ink can reduce or eliminate misting.

Q. How can ink mileage be increased on a press?

A. The amount of pigment in the ink will have the greatest effect on ink mileage. Pigment is the most expensive ingredient in ink; typically, less expensive inks with less pigment will have poorer mileage. Paper coatings keep more of the ink on the surface and tend to require less ink. Any condition on the press, including ink/water balance and printing pressures that cause the press operator to run a heavier ink film, will increase ink consumption. Theoretically, the best lithographic printing occurs with just enough fountain solution to keep the plate from scrumming and just enough ink to print the required solid ink density. GCR (Gray Component Replacement) can also reduce ink consumption of process colors by making the black separation heavier and reducing the amount of ink used by the CMY separations to create grays.

Q. I'm thinking of trying to land some packaging jobs. What things should I be aware of?

A. Many companies are trying to augment their commercial print revenue with packaging work, since the packaging market continues to grow. Our best guess is that 15% of commercial firms are generating revenue from packaging (primarily cartons, labels, and point of sale displays). It

has its own challenges, however. It may require capital investments, such as purchasing a folder-gluer or die cutter, or alternatively finding a partner company that has those production capabilities. Also, there are likely to be higher expectations for prepress quality, color management expertise, and managing brand assets. Clients often seek out companies that can also fulfill packages. Consumer product companies, in particular, can be demanding clients and have little tolerance for rookie mistakes. In short, plenty of companies have successfully ventured into the packaging market, some that have eventually repositioned themselves as packaging specialists. Be aware of the requirements and seek out opportunities that fit your developing capabilities and skills.

## **Printing Industries Resources:**

Offering unbiased and confidential results, Printing Industries of America provides a range of testing and laboratory services to help solve printing-related problems. For more information, please contact Jim Workman at 800-910-4283, ext. 710 (direct 412-259-1710), visit <a href="https://www.printing.org/labservices">www.printing.org/labservices</a> or email <a href="mailto:labservices@printing.org">labservices@printing.org</a> or <a href="mailto:jworkman@printing.org">jworkman@printing.org</a>.