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; technology training; and simulators.

Q. Why is my UV coating showing a yellowish cast?

A. UV coating normally does not yellow. The most common cause of yellowing of UV coated stocks is excessive heat from the UV dryer. Try cutting back on the amount of energy used in the UV dryer or speed up the press. PIA has a paper and ink lab that can often be used to determine why problems occurred.

Q. Photoshop has many image sharpening tools, but which one is the best?

A. By far, the tool that offers the most control and yields best results for sharpening images is the Unsharp Mask tool. Unsharp Mask introduces sharpness by evaluating and adjusting the contrast difference between pixels along an edge. These pixels along this edge are made lighter (and/or darker) giving the illusion of sharpness. Unsharp Mask offers three controls:

- **Radius.** The Radius setting affects the size of the edge to be enhanced and determines how far out from an edge contrast is increased. This is typically the most critical setting as high amounts can cause unwanted halos, especially in flesh tones. A good starting point for the Radius setting is 1–2 pixels.
- **Amount.** Amount determines how much darker and how much lighter the edge borders become where the light and dark pixels meet. A good starting point for the Amount setting is 60%.
- **Threshold.** Threshold is the difference in tonal values necessary for pixels to be affected by the sharpening. Low values sharpen more because fewer areas are excluded. Higher threshold values exclude areas of lower contrast. A good starting point for the Threshold setting is 3–4 levels.

Finally, always view images for sharpness in Photoshop at even zoom views, such as 50%, 75%, 100% and so on. Viewing images at any other zoom rate will make the image appear sharper than it actually is when it prints.

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Q. How might the new EU data protection regulation impact my firm?

A. Back in 2016, the European Union passed a new regulation—General Data Protection Regulation (GDPR)—to safeguard the data of EU citizens. That regulation took effect on May 25 of this year and is relevant to companies that collect or process personal data of EU citizens, regardless of where they are located. GDPR treats data privacy as an individual right and requires companies to explain in clear and unambiguous language how the data will be used; get an individual's permission; and provide a procedure for individuals to check, correct, and delete their data. In addition, there are strict requirements if a breach occurs. Printing companies collecting the data of EU citizens through websites, or receiving it in client databases, will be affected. Since we've already received calls from member firms, we know GDPR is impacting printing companies. Now is the time to evaluate your physical and technical information security practices. There will be increasing pressure for printers to demonstrate their careful attention to data privacy and security. PIA partners with an information security firm to provide assistance when members need it.

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 www.printing.org/labservices or email labservices@printing.org or jworkman@printing.org.