Printing Industries of America
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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. Static is a major problem in our operation—it causes the paper to double feed and results in paper jams. At what humidity does static becomes a problem?

A. Pressrooms and binderies with a relative humidity of 35% or lower are likely to see static build up on machines handling paper. Pressrooms and binderies should maintain a relative humidity of 45%–55% to avoid static build up on machines handling paper. Control of the relative humidity is achieved with humidification during dry periods and dehumidification with air conditioning during humid periods.

Q. What is archival paper?

A. The archival paper specifications are contained in ISO 11108:1996, Archival Paper—Requirements for Permanence and Durability. Archival paper specifications call for a neutral/alkaline pH and no lignin. Lignin is the material in wood that bonds the cellulose fibers. In the chemical process of papermaking the wet pulping and bleaching process dissolves the lignin. Groundwood pulp, on the other hand, is made by grinding the wood and the lignin remains. Paper with groundwood pulp will be less stable over time; paper with an acidic pH will interact with the lignin and accelerate the yellowing of the paper, especially when exposed to UV light. Most paper made today has alkaline sizing and a neutral or alkaline ph.

Q. For bindery and postpress, are there any special considerations for production inkjet that must be considered?

A. Be certain that you perform your due diligence when it comes to compatibility, particularly with finishing techniques. Make sure that if you're using coating, foiling, or any other specialty or non-standard postpress operations, that they are compatible with the planned inkjet solution. Changes to any current investments in these solutions to ensure compatibility could be substantial, and you should test thoroughly as part of your vetting process.

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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.