



SONOCO
INSTITUTE
CLEMSON® UNIVERSITY

Introduction to Flexography Workshop

Location: Bobst Competence Center

Day 1

- 8:00** **Program Overview and Introductions**
- 8:30** **Presentation: Overview of Major Printing Processes**
Litho, Gravure, Screen, Digital, Letterpress and Flexo: Compare and Contrast
- 9:30** **Presentation: Inks, Anilox and Doctor Blades**
Ink types and properties, role of the anilox, anilox specifications, and doctor blade configurations
- 10:30** **Hands-On: Print Banded Anilox Press Run (plates pre-made)**
Plate mounting, ink preparation, anilox selection and pressmanship.
- 11:30 Lunch
- 12:30** **Presentation: Image Reproduction**
File construction, halftone theory, image terminology
- 1:15** **Presentation: Density and Tone Value**
Learn how density and tone value are measured.
- 1:30** **Hands-On: Evaluation of Banded Test**
Measure effect of LPI and anilox volume on color strength and dot gain.
- 2:45 Break
- 3:00** **Demo/Hands-On/Presentation: Technical Prepress for Flexo**
Prepare 2-color design files for printing.
- 3:30** **Demo: RIP and Output**
Setup master file for plate output. Discuss RIP parameters.
- 4:00** **Hands-On: 2-Color Press Run on BOBST Vision CI press**
Set-up, ink preparation, setting print impression, registration color-to-color, press clean up and measurement.
- 6:00 End of Day 1

Day 2

- 8:00** **Presentation: Flexographic Platemaking**
Various workflows for making a flexographic printing plate
- 9:00** **Hands ON: 4-Color design and prepress**
Design, RIP, get plates started.
- 10:30** **Presentation: Color Measurement and Comparison**
Measuring and defining color with Lab, comparing color with Delta E.
- 11:00** **Hands-On: Color Measurement and Comparison**
Measure and compare color with a spectrophotometer.
- 11:30 Lunch
- 12:30** **Presentation: Press Optimization and Characterization**
Creating optimized print conditions and conducting a press characterization.
- 1:15** **Hands-On: Platemaking and Mounting**
Finish plates and mount to sleeves.
- 2:15** **Hands-On: 4-Color Process Press Run on OMET**
Print CMYK job on press, color control for process printing.
- 3:45** **Hands-On: Flexo Print Defects**
Examine and discuss common print defects.
- 4:30** **Recap and Questions**
- 5:00 End of Workshop