



**SONOCO**  
**INSTITUTE**  
CLEMSON® UNIVERSITY

## Introduction to Flexography Workshop

Location: Harris A. Smith Room 101

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### Day 1

**8:30 Program Overview and Introductions**

**9:00 Presentation: Overview of Major Printing Processes, Flexography**

Litho, Gravure, Screen, Digital, Letterpress and Flexo: Compare and Contrast

**10:00 Presentation: Inks, Anilox and Doctor Blades**

Ink types and properties, role of the anilox, anilox specifications, and doctor blade configurations

**11:00 Hands-On: Print Banded Anilox**

Plate mounting, ink preparation, anilox selection and pressmanship.

12:00 Lunch

**1:00 Presentation: Image Reproduction**

File construction, halftone theory, image terminology

**1:45 Presentation: Density and Tone Value**

Learn how density and tone value are measured.

**2:00 Hands-On: Evaluation of Banded Test**

Measure effect of LPI and anilox volume on color strength and dot gain.

3:15 Break

**3:30 Demo/Hands-On/Presentation: Technical Prepress for Flexo**

Prepare 2-color design files for printing.

**4:00 Demo: RIP and Output**

Setup master file for plate output. Discuss RIP parameters.

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## Day 2

**8:00 Hands-On: 2-Color Press Run on OMET**

Set-up, ink preparation, setting print impression, registration color-to-color, press clean up and measurement.

**10:30 Presentation: Flexographic Platemaking**

Various workflows for making a flexographic printing plate

12:00 Lunch

**1:00 Hands ON: 4-Color design and prepress**

Design, RIP, get plates started.

**2:30 Presentation: Color Measurement and Comparison**

Measuring and defining color with Lab, comparing color with Delta E.

**3:00 Hands-On: Color Measurement and Comparison**

Measure and compare color with a spectrophotometer.

**3:45 Presentation: Press Optimization and Characterization**

Creating optimized print conditions and conducting a press characterization.

5:00 End of Day

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## Day 3

**8:00 Hands-On: Platemaking and Mounting**

Finish plates and mount to sleeves.

**9:00 Hands-On: 4-Color Process Press Run on OMET**

Print CMYK job on press, color control for process printing.

**10:00 Hands-On: Pressroom Cleaning and Maintenance**

Proper techniques for plate and anilox cleaning and storage.

**11:00 Hands-On: Flexo Print Defects**

Examine and discuss common print defects.

**11:45 Recap and Questions**

12:00 End of Workshop