



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

## Process Control for Flexo Seminar

Location: Harris A. Smith Auditorium

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Day 1

**8:30 Program Overview and Introductions**

**9:00 Review of Flexographic Printing**

A comprehensive review of the flexographic printing process and the variables in play.

10:15 Break

**10:30 Colors and Dots**

Ultimately flexo printing involves managing halftone dots and color onto a substrate. This session will cover the measurement of color and dot area as tools for process control.

12:00 Lunch

**1:00 Ink**

Components of ink formulation, ink measurement and troubleshooting.

**2:00 Anilox**

In order to deliver a precise amount of ink to the plate, an anilox roller is employed. Proper selection and maintenance of this critical component will be reviewed.

**3:00 Breakout Session: Hands-On Ink Characteristics**

Ink drawdowns, pH and viscosity measurement.

**4:00 Breakout Session: Anilox Care and Maintenance**

Proper cleaning techniques, testing anilox volume, and effect of volume on color.

5:00 End of Day

5:30 Group Dinner

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## Day 2

**8:30 Digital Platemaking**

Imaging and processing a flexo printing plate is a complex task, this session will break down variables and how to measure them in the plateroom.

**9:15 Press Characterization**

Understanding how the press characterization plays a role in capturing press capabilities and predicting print outcomes.

9:50 Break

**10:00 Breakout Session: Plateroom Measurements**

Stain test, light output, relief measurement and more.

**11:00 Breakout Session: Press Characterization**

Run characterization to gather color and print information.

12:00 Lunch

**1:00 Proofing for Flexography**

Predicting results is a critical part of process control. Review options for color proofing hardware and software, the workflow of how to set it up, and how to ensure it remains accurate.

**1:45 Screening and Curves**

Dot shape, bump curves, and compensation curves are all essential for maintaining predictable results.

2:15 Break

**2:30 Breakout Session: Tone Value and Curves**

Hands-on with measuring tone value and generating press curves.

**3:45 Breakout Session: Spectrophotometry**

Hands-on with spectrophotometers: color, color difference and dot area measurements.

5:00 End of Day

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## Day 3

### **8:30 Hands-On Pressroom Challenge**

The group will tend to a press run with many issues and use the tools you've learned during this course to problem solve.

### **10:45 Inline Measurement Devices**

Inline spectrophotometers and web inspection are making process control faster, learn how this new technology works with a firsthand demonstration.

### **11:00 Break**

### **11:15 Q&A and Evaluations**

12:00 Adjourn