



Spray Technology Seminar

Monday, July 22, 2024 – Atomization, Nozzle Basics & Design

Location: [SprayTechSeminar](#)

9:00 am - 9:15 am (15 min)

Introductions and Spraying Systems Company Overview – Ann Coles

9:15 am - 10:15 am (60 min)

Physics of Atomization – Kyle Bade

- Droplet breakup
- Dimensionless numbers
- Spray basics
- Spray performance considerations

10:15 am - 10:45 am (30 min)

Hydraulic Nozzles – Kyle Bade

- Hydraulic nozzle types
- Patterns
- Applications

10:45 am - 11:00 am (15 min)

Break

11:00 am - 11:45 am (45 min)

Design and Performance of Single Fluid Nozzles – Bob Till

- Finding the right nozzle!
- Nozzle Specifications
- Spray Angle
- Spray Impact
- Tank Cleaning

11:45 am – 12:00 pm (15 min)

Day 1 Q&A – Kyle Bade

12:00 pm

Adjourn

All times in Central Daylight Time, CDT (UTC -6)



Spray Technology Seminar

Tuesday, July 23, 2024 – Fine Spray Nozzles & Process Optimization

Location: [SprayTechSeminar](#)

9:00 am - 9:05 am (5 min)

Day 2 Introduction – Ann Coles

9:05 am - 9:55 am (50 min)

Fine Spray Nozzles – Paul Vesely

- Misting nozzles & fogging nozzles
- SprayDry® nozzles
- Electrostatic & Ultrasonic nozzles
- Air atomizing nozzles

9:55 am – 10:45 am (50 min)

Spray Process Development and Optimization – Paul Vesely

- Flow & Pressure Measurement
- Rheology (Liquid Property Effects)
- Spray distribution, pattern, and coverage

10:45 am – 11:00 am (15 min)

Break

11:00 am - 11:45am (45 min)

Spray Characterization – Kyle Bade

- Coverage & overlap optimization
- Drop size measurement
- What effects drop size?

11:45 am – 12:00 pm (15 min)

Day 2 General Application Q&A – Kyle Bade

12:00 pm

Adjourn

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Spray Technology Seminar

Wednesday, July 24, 2024 – Application Technology & Monitoring

Location: [SprayTechSeminar](#)

9:00 am - 9:05 am (5 min)

Day 3 Introduction – Ann Coles

9:05 am - 9:40 am (35 min)

Spray Control Systems – Aaron Jordan

- Pulse width modulation
- Precision spray control
- Automatic spray nozzles
- Spray control systems
- Spray applications

9:40 am - 10:10 am (30 min)

Application based Spray Technology: SprayDry – Evan Salmon

- Nozzle maintenance & cleaning
- Nozzle maintenance plan
- Nozzle optimization
- Importance and impact of sustainability

10:10 am - 10:45 am (35 min)

Paper Production Application, Best Practices – Bernard Pyzdrowski & Brian Moran

- Nozzle maintenance & cleaning
- Nozzle maintenance plan
- Nozzle optimization

10:45 am – 11:00 am (15 min)

Break

11:00 am - 11:30 am (30 min)

Spray Process Improvement using Computational Fluid Dynamics – Justin Burger/
Guillaume Dumas

11:30 am - 11:55 am (25 min)

SprayScan® for Spray Monitoring and Optimization – Kyle Bade

11:55 am - 12:00 pm (5 min)

Day 3 Q&A and Closing Comments – Kyle Bade

12:00 pm

Adjourn