

# Emerson Exchange Pulp & Paper Industry Forum

## Meet the Panel



### Brad Emry

*Account Manager,  
RE Mason, Charleston, SC*

Brad Emry is an Account Manager for RE Mason Company and is based in Charleston, SC. He graduated with a B.S. in Chemical Engineering from the University of Nebraska in 1984. Brad joined Fisher Controls in Marshalltown,

IA working in the Chemical Industry Applications Engineering Group and as Manager of Applications & Sales for the Pulp and Paper Industry Group before joining RE Mason in 1992. In addition to account responsibilities, Brad is one of RE Mason's FIELDVUE™ and Wireless Champions.



### Jennifer Sandstrom

*Sr. Industrial Energy Consultant  
Emerson Process Management, Round Rock, TX*

Jennifer Sandstrom is an Industrial Energy Consultant at Emerson Process Management with 21 years of experience in industry and process control. Her experience includes automation projects in pulp and paper and industrial energy,

design, migration and support of control networks and systems. Jennifer has functioned in a variety of roles, including maintenance planning, project management, project engineering, reliability engineering, sales support and consulting, and construction management.



### Larry Hammett

*Instrumentation & Reliability Specialist  
International Paper, North Augusta, SC*

Larry Hammett is an Instrumentation and Electrical Reliability Specialist with International Paper's Technology Reliability COE out of Loveland, OH. He is based in the North Augusta, SC area. Prior to International Paper, he worked for

Chemical Corporation and Savannah River Site (Nuclear) near the Augusta, Georgia area. Larry has 20 plus years of experience working with various control, instrument, electrical assets, and advanced I&E Training applications. He has held positions of I&E Technician, I&E Crew Leader, I&E Systems Startup Technician, and I&E Project Manager.



### Doug DeBruin

*Maintenance & Engineering Manager  
Clearwater Paper, Lewiston, ID*

Doug De Bruin is the Maintenance and Engineering Manager with Clearwater Paper at its Consumer Products Division in Idaho. Prior to Clearwater Paper, he worked for Potlatch, PCE Pacific (Emerson LBP), Fisher Controls, and managed

his own automation consulting firm. Doug has 28 years of experience working with various control and information systems, DCS and PLC platforms, and custom programming. He has held positions of Field Systems Engineer, Control Systems Engineer, Sr. Process Control Engineer, and E&I Supervisor.

## Forum Discussion Topics: Current trends in Pulp & Paper

- Wireless is here to stay – what are the main ways mills are using it?
- Pulp & Paper has done energy optimization for years. What are the latest ways mills are looking at their energy optimization initiatives?
- What ways are mills reducing variability and improving reliability; either through product selection or diagnostics?
- How are people being successful getting capital projects approved?
- Shrinking workforce and a new generation – how are mills adapting?
- PLC's ... where do you draw the line and why?



## Pulp & Paper Workshops & Short Courses

### **The thrill of victory, the agony of defeat, and the success of DCS migration!**

Session ID: 3-5025 | Tues. 8 am, Mustang 4 | Thurs. 10 am, Austin 4

Discusses the need for uptime and production, and how finding an extended amount of time to update a legacy DCS system is impractical and costly. Learn how Clearwater Paper used the DeltaV Connect for Honeywell Solution to start the migration from a Honeywell TDC3000 system, and an interface for our data historian(PI) data, with limited costs and downtime.

### **Vibration Monitoring in a Pinch**

Session ID: 12-5296 | Tues. 8 am, Dallas 2 | Wed. 11 am, Ft. Worth 7

This presentation will cover how Longview Fibre Paper and Packaging uses a wireless gateway and wireless vibration transmitter to monitor rotating equipment continuously on a temporary basis. The mill has many pieces of rotating equipment that are not monitored continuously for vibration and have suffered very expensive, catastrophic failures because the vibration increased dramatically in a short period of time. The wireless system allows the vibration to be monitored 24/7 without sending out a tech.

### **Brownfield Chip Screening Facility migration to DeltaV using all digital bus I/O**

Session ID: 3-4560 | Tues. 9 am, Grapevine 3 | Wed. 10 am, Appaloosa 1

A workshop about how a traditional brownfield control installation of relay logic and benchboards were migrated to DeltaV with an all digital bus I/O in the chip screening facility of a Pulp & Paper mill. The digital buses used were: Fieldbus for analog I/O, Asi for discrete I/O, and DeviceNet for motor control centers and variable speed drive control. The only conventional I/O card used was a 24v DI card to monitor fault contacts on the power supplies in the DeltaV cabinet.

### **"Awesome!" Steam Turbine Control using DeltaV, DCG, and CSI**

Session ID: 3-5280 | Tues. 11 am, Dallas 5 | Thurs. 1:15 pm, Austin 4

Annual operational savings of >\$300K are realized when Phillip Morris replaces an obsolete OEM turbine generator control system with an Emerson solution that includes DeltaV, DGC exciter controls, and CSI machinery health monitoring. The flexible system has multiple turbine control modes that are presented to the operator on the existing DeltaV system. Immediate improvements were realized, including reduced steam venting and increased power generation.

### **Paper mill utilizes non-contacting radar to monitor wood chip bin level for continuous control**

Session ID: 6B-4645 | Wed. 10 am, Mustang 1 | Thurs. 10 am, Del Rio 2

Domtar Paper utilized a non-contacting radar transmitter to monitor the level in their wood chip bin. The use of this radar has enabled the process level of the wood chips to be monitored continuously, improve reliability of the measurement, reduce operations costs, and increase safety.

### **Norske Skog Bruck Restores Basis Weight Control**

Session ID: 6A-4385 | Wed. 10 am, Del Rio 1 | Thurs. 4:15 pm, Mustang 5

This session presents Norske Skog Bruck's experience using high process noise diagnostics and noise mitigation technology to restore automatic basis weight control.

### **Paper Mill Monitors Plant Processing Using Wireless Camera System**

Session ID: 12-4838 | Tues. 9 am, Dallas 3 | Wed. 1:15 pm, Dallas 5

A South Carolina paper mill expanded its video camera monitoring system by implementing a wireless IP camera solution provided by IV&C (Camera) and ProSoft Technology (Wireless). This camera solution is monitoring several key process locations throughout the plant. A video server captures 4 cameras and displays these four locations onto a 70" LCD display that is located in the plant control room. The wireless technology used in this application is based on 802.11n technology.

### **Accurate, Online Density Measurement of Green Liquor Realized**

Session ID: 6A-5313 | Wed. 8 am, Dallas 4 | Thurs. 4:15 pm, Pecos 4

Better online process data in the pulp & paper industry continues to be major focus for mill management as they attempt to meet the ever increasing demands for optimization. At Buckeye Paper, the chemical recovery loop has been an area of focus in recent years and spending capital strategically is carefully considered; paper mills have always debated when to buy instrumentation to better control the process.

### **The Dirty Dozen of the Pulp & Paper Industry**

Session ID: 11-5295 | Tues. 11 am, Ft. Worth 6 | Thurs. 8 am, Palomino 3

There are twelve critical applications in the pulp and paper industry that require reliable control valve performance in harsh conditions: digester level, digester blow, digester switching, chlorine dioxide, pressure filter switching, lime mud underflow, green liquor weak wash, black liquor to nozzles, basis weight, main steam PRV, feedwater startup and regulator, and sootblower. Fisher provides a wide range of control valves that will reduce maintenance costs and maintain optimal performance in these, and other, critical applications.

### **Your Control Network is Critical—or is it Critically Ill?**

Session ID: 4-4771 | Tues. 8 am, Ft. Worth 6 | Wed. 3:15 pm, Appaloosa 3

Arauco's ACN switchovers ascended to abnormal latency conditions, resulting in partial loss of communication between DeltaV nodes. The Network Assessment service identified network issues and recommended actions based on Emerson's network installation guidelines, best practices, and industry standards. Through this, Arauco has addressed the maladies of a critical network that was otherwise critically ill.

## Contact Us/Get Involved Next Year

### **Doug DeBruin**

Maintenance & Engineering Manager  
Clearwater Paper Corporation  
Consumer Products Division  
801 Mill Road, Lewiston, ID 83501  
T 208 799 8855 C 509 780 1921  
Doug.DeBruin@ClearwaterPaper.com

### **Danny Streets**

Senior Technical Consultant  
Emerson Process Management,  
Process Systems & Solutions  
T 304 209 8639  
Danny.Streets@Emerson.com

### **Janine McCormick**

Industry Manager: Pulp & Paper/Metals & Mining/Life Sciences  
Emerson Process Management, Fisher  
205 S. Center Street, Marshalltown, IA 50158  
T 641 754 3733 F 641 754 3864  
Janine.McCormick@Emerson.com



Sept. 30–Oct. 4, 2013  
Grapevine, Texas

COMBINING  
THE ELEMENTS