Honorable Members of PUPID,

Well, it is already the first week of November and Thanksgiving is just three weeks away!

Back to the business at hand – the newsletter; our net division membership has stayed constant at 306 members with 12 new division members since August of 2015. Welcome to the new members!

We’ve about got the full program completed for the 2015 ISA Process Control & Safety Symposium. PUPID has one track on the first two of three days at this year’s symposium (four – 90-minute sessions - the same as last year). So, come on down to the Houston Westchase Marriott the second week of November.

I strongly urge you to read the presentations in this Logger newsletter:

“An Update on Consistency Transmitter Measurement Technology & Process Considerations” paper by Mike Hendricks of BTG and


Also, I have a couple of links to presentations from Suzano, Fibria, & Klabin for you to learn about the $12B worth of projects going on in Brasil. Go to the “World Corners section on page 12 to see those

Please do not hesitate to contact me at my email brad.carlberg@bsc-engineering.com to discuss how you can help PUPID.

I hope it is an encouragement to you to become more involved with the Division and to enroll more members from the great

Do feel free to forward the Newsletter to your friends and colleagues who may have an interest in it.
**TUNING TIP CSE PE REVIEW QUESTION**

**QUESTION: HAZARDOUS AREA INSTRUMENT WIRING PROBLEM**


The following information applies to the apparatus shown in Figure 1.

- The thermocouple is Type J, ungrounded
- The maximum voltage produced by the thermocouple is < 0.05 V
- The thermocouple is considered as a “simple device”; i.e., it will not create or store enough energy to ignite any mixture of hazardous gases
- The hazardous area is classified as Class 1, Division 1, Group A (acetylene)

**NON-HAZARDOUS AREA**

<table>
<thead>
<tr>
<th>110 VAC Power</th>
<th>Temperature Recorder</th>
<th>Cold Reference Junction</th>
<th>Field Junction Box</th>
<th>Thermocouple</th>
</tr>
</thead>
</table>

**HAZARDOUS AREA**

Answer the following questions about the safety of the circuit in Figure 1.

1. **Is the thermocouple, which is in a Class 1, Division 1, Group A hazardous area inherently safe and why or why not?**
   - A. Yes, because it is a “simple device”
   - B. Yes, because the circuit is unpowered
   - C. No, because there is no ground connection
   - D. No, because an electrical fault in the temperature recorder could cause excess energy to reach the hazardous area

2. **Assume the thermocouple does meet safety requirements for the area classification. Select the best one of the following techniques to make it meet applicable wiring safety requirements.**
   - A. Ground the thermocouple at the tip.
   - B. Install a galvanic isolation device(s) in the circuit; e.g., transformer, relays, opto-couplers,
   - C. Install an intrinsic safety barrier in the circuit.

3. **Based upon your answer to question 2, select the additional apparatus needed and sketch a diagram of the resulting circuit, including any grounding.**
   - A. Use a grounded tip thermocouple and ground the shield of the thermocouple extension wire at the control room end
   - B. Install an isolation transformer in the circuit in the field junction box and leave the circuit ungrounded
   - C. Install a double intrinsic safety barrier on the non-hazardous side of the circuit and ground the barrier and the recorder supply common to the grounding electrode with not more than 1 ohm path resistance.

Find the answers to these questions on page 12

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**Calendar of Events**

Get a quick overview of the ISA PUPID events by going to the Calendar at: [https://www.isa.org/division/pupid/events/](https://www.isa.org/division/pupid/events/)

**2016 ISA Summer LEADERS MEETING**

**FRIDAY, June 11, 2016 THROUGH TUESDAY, June 16, 2015**

**COURTYARD RALEIGH CRABTREE VALLEY**

Come meet your leaders & get involved!

**2016 BLRBAC Meetings**

**Spring Meeting:** June 4 – 6, 2016

**Fall Meeting:** October 3 – 5, 2016

[www.blrbac.org](http://www.blrbac.org)

**ABTCP 2016-49th Pulp & Paper International Congress & Exhibition**

10/6/2016 to 10/8/2016

Transamerica Expo Center

Sao Paulo, Brasil


**2016 ISA FALL LEADERS MEETING**

**FRIDAY, September 24, 2016 THROUGH TUESDAY, September 27, 2015**

**NEWPORT BEACH, CA**

Come meet your leaders & get involved!

**China Paper 2016**

**23rd International Exhibition & Conference**

10/14/2016 to 10/16/2016

Intex Shanghai, China


**2016 ISA PROCESS CONTROL & SAFETY SYMPOSIUM**

**MONDAY, NOVEMBER 7, 20165 THROUGH THURSDAY, NOVEMBER 10, 2016**

**HOUSTON WESTCHASE MARRIOTT**

**HOUSTON, TX**
WELCOME TO THE 12 NEW ISA PULP & PAPER INDUSTRY DIVISION MEMBER SINCE AUGUST, 2015

Mark George     Nathan Van Fleet      Ms Shwetha K L
Jean-Guy Lagacé  Stephen Peter Tapp    Vikas Vasnat Soladi
Ms Deepika G    Taynara Leal Da Silva  Ms Shwetha T R
Ken Jackson     Amrutheshwara Bahradwaj A M  Dwight J Beard

HERE’S A REMINDER TO THE 27 ISA PULP & PAPER INDUSTRY DIVISION MEMBERS WHO NEED TO RENEW THEIR MEMBERSHIP

Glauco Andreoti  Dr. Jacqueline MacPherson  Keith Charlton
Idelmar Barcelos  Sonia Melo Cabezuela  Emerson de Oliveira Lanna
Patricio A. Gomez  Oscar Fabian Navarro Duran  Mauro Epaminondas Carvalho
Aroldo Elias Da Silva  Guy A. Nuechterlein  Marcio Domingos Oliveira
Daniel Dufour  Edward Armando Rincon  Henrique Cassaro Pereira
Kalyanasundaram G  Ms. Priya Gowthami  Dr A. Sahaya Anselin Nisha
Ms Anderson Jesus Dos Santos  Ms. Paula Sawatzky  James Susini
Ms. Menaka Kaliyannan  Bret Soeten  Stewart A. Whitlow
Tiago Da Cunha Luna  Dr. Maurizio Brancaleoni  Eric Yuen

DON’T FORGET TO RENEW!
Explosion in sodium hypochlorite tank at Ilim's Bratsk mill in Russia leaves one dead, two injured; production unaffected
Thu, Nov 05, 2015
ST PETERSBURG, Russia, Nov. 6, 2015 (Press Release) - This morning at 10 a.m., a vapor explosion occurred in the low concentration sodium hypochlorite tank at the Bratsk Mill site. The accident happened when the employees of Ilim's contractor, Sibavtomatika, were working on the site. The ignition of vapors tore out the upper cover of the tank, killing one of Sibavtomatika employees and injuring two others. The two employees sustained injuries of different levels of severity and were taken to hospital. The accident involves no environmental or industry-related consequences, nor does it pose any threat to life and health of Company employees or Bratsk residents. A special commission was set up to investigate the causes of the accident.

Valmet to rebuild press section at Marusumi Paper's Ohe mill in Japan
Mon, Nov 09, 2015
ESPOO, Finland, Nov. 9, 2015 (Press Release) - Valmet will supply a paper machine rebuild to Marusumi Paper's Ohe mill in Japan. The rebuild includes a new press section utilizing Valmet's modern shoe press technology. The main target of the rebuild is to decrease energy consumption at the plant. The rebuilt machine will be started up during fourth quarter of 2016. The order was included in Valmet's third quarter 2015 orders received. The value of the order is not disclosed. "The trend in newsprint production has recently been towards lighter paper weights, driven by resource and energy savings. To further meet this lighter weight tendency, Marusumi Paper has decided to proceed with a press rebuild project in order to improve productivity and end product quality. We chose Valmet as a supplier for this rebuild for several reasons. The original supplier of the machine is Mitsubishi Heavy Industries, and Valmet has acquired the company's paper machinery technology. We have also had good experience with Valmet in an earlier project when installing a sizer for Ohe mill's PM 3 in 2005. We are expecting great performance from Valmet also with this project", says Toru Shinohara, Director and Mill Manager, Marusumi Paper Co., Ltd. "Valmet can offer key technologies for challenging rebuilds, and pressing technology is one of our core know-how areas. Modern pressing technology can help our customers to achieve higher end product quality and significantly decrease energy consumption," says Petri Paukkunen, Vice President, Paper Mills Sales and Marketing, Valmet. Key features of the delivery Valmet's delivery includes a new center roll based press section with modern shoe press technology as well as related runnability solutions, new press section frames, installation, motors and electrification. The existing press section at PM 2 will be rebuilt into Valmet's OptiPress Center press section. With this tri-nip solution, the new 1st press, the 2nd press and the 3rd press shoe nip maximizes the dry content, decreases steam consumption and increases the wet strength of the paper. The 9000-mm-wide (wire) PM 2 produces newsprint grades at the design speed of 1200 m/min. About Marusumi Paper Co., Ltd. Marusumi Paper Co., Ltd. is the Japanese paper making company which produces and sells paper products. The company was founded in 1919 with almost 100 years of history, and it is based in Ehime Prefecture, Japan. Valmet is the leading global developer and supplier of technologies, automation and services for the pulp, paper and energy industries. Valmet's vision is to become the global champion in serving its customers. Valmet's services cover everything from maintenance outsourcing to mill and plant improvements and spare parts. The strong technology offering includes pulp mills, tissue, board and paper production lines, as well as power plants for bio-energy production. Valmet's advanced automation solutions range from single measurements to mill wide turnkey automation projects. Valmet's net sales in 2014 were approximately EUR 2.5 billion. Our 12,000 professionals around the world work close to our customers and are committed to moving our customers' performance forward - every day. Valmet's head office is in Espoo, Finland and its shares are listed on the NASDAQ OMX Helsinki Ltd.
WHO’S DOIN’ ANYTHING? (CONTINUED)

Fibria lays cornerstone of Horizonte 2 Project, which will more than double its Três Lagoas unit capacity in Mato Grosso do Sul

SAO PAULO, Oct. 30, 2015 (Press Release) -

Fibria, a Brazilian forestry company and the world’s leading eucalyptus pulp producer, today lays the cornerstone of the Horizonte 2 Project, which will expand production capacity of its Três Lagoas Unit located in the state of Mato Grosso do Sul. The ceremony celebrates the official start of construction work, which is already in progress.

The Horizonte 2 Project, approved by the Board of Directors of Fibria on May 14th, is backed by an investment of R$ 7.7 billion (equivalent to about US$ 2.5 billion). Over its two years of construction, the project will create around 40,000 direct and indirect jobs. At the height of construction, the project will employ around 10,000 workers. Once commissioned, in the last quarter of 2017, Fibria’s new pulp line will employ 3,000 direct and indirect workers.

Klabin – Laying of the cornerstone of the Puma Project (EN)
https://www.youtube.com/watch?v=BuGWNx_bRmA

ABB To More Than Double Production Capacity At Brazilian Pulp Plant

ABB to deliver integrated power and automation solution for new pulp mill, more than doubling plant capacity

Zurich, Switzerland – ABB, a leading power and automation technology group, will supply integrated process electrification, automation and optimization systems for Fibria’s new pulp mill in Mato Grosso do Sul, Brazil. Civil works on the ‘Horizonte 2’ project will begin at the end of 2015, with the new plant coming online in 2017.

The Fibria unit in Três Lagoas is already today one of the world’s largest pulp production plants. Once completed, the new mill will more than double the plant’s capacity through the addition of 1.75 million tons of pulp production per year. The pulp produced by Fibria is used for a wide range of papers including tissue, printing and writing.

ABB is supplying an integrated electrification and automation solution that will be applied in almost all process areas allowing for control and operation of the new mill alongside the existing one. The short-fiber eucalyptus pulp manufacturer awarded ABB the project based on technical and commercial criteria.

According to Peter Terwiesch, president of ABB’s Process Automation division, ABB’s combined power and automation portfolio means the company is ideally positioned to provide integrated electrification and automation solutions for process industries such as pulp and paper.

“Having a single control system for two different plants increases the productivity and effectiveness of our customers,” said Terwiesch. “With our integrated power and automation solutions, we are making industry more efficient and ready for the Internet of Things, Services and People, in line with our Next Level strategy.”

The project scope consists of expanding the primary substation, the gas-insulated switchgear technology, distribution transformers for the plant and power transformers for the generators, as well as low voltage switchgear, variable-speed drives, low and medium voltage motors and DCS.
WHO’S DOIN’ ANYTHING? (CONTINUED)

Also integrated is an asset optimization system which allows ABB to remotely monitor operations from a location thousands of kilometers away to provide data to support Fibria’s maintenance engineering decisions. This will help the pulp manufacturer to optimize its maintenance strategy procedures.

Andritz To Supply Cooking Plant For Huanggang Chenming Pulp & Paper's Pulp Mill In China

International technology Group Andritz has received an order from Huanggang Chenming Pulp & Paper, China, to supply the cooking plant for its greenfield pulp mill in Hubei province, China, as the company said in the press release received by Lesprom Network.

This is the second consecutive continuous cooking order from the Chenming Group and confirms Andritz’s leading global position in continuous cooking technologies suited for production of both kraft pulp for paper grades and dissolving pulp.

The Andritz cooking plant will feature the latest technology, meeting Huanggang Chenming’s requirement to produce both softwood kraft pulp for paper grades and dissolving pulp for textiles and industrial applications. The system includes Andritz’s proven pre-hydrolysis vessel to remove most of the hemicelluloses in the wood in order to achieve extremely high pulp purity.

In addition to the cooking plant, Andritz will deliver equipment for handling non-condensible gases in order to eliminate odorous emissions in the mill.

SOURCE: Andritz
### 2016 Pulp & Paper Industry Division Calendar

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**Conferences**

- ISA FLM Newport Beach, CA
- ISA PC&S Westchase Houston, TX
- ISA SLM Raleigh, NC

**Holidays**

- New Year's Day
- Martin Luther King Jr. Day
- Presidents' Day
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Veterans Day
- Thanksgiving
- Christmas

**Special Days**

- Valentine's Day
- Mom's Day
- Father's Day
- President's Day
- Independence Day
- Labor Day
- Columbus Day
- Veterans Day
- Thanksgiving
- Christmas
AN UPDATE ON CONSISTENCY TRANSMITTER MEASUREMENT TECHNOLOGY & PROCESS CONSIDERATIONS

BY: MIKE HENDRICKS
Application Manager
BTG Americas Inc.
mike.hendricks@btg.com

Originally presented at the 2015 TAPPI Peers Conference at the Hyatt Regency Atlanta on Wednesday, October 28, 2015
ADDRESSING CYCLING PROBLEMS IN PULP & PAPER PROCESSES

TUTORIAL: DIAGNOSING THE ROOT CAUSE OF OSCILLATIONS

BY: STEVE OBERMANN
Manager Services & Support
Metso Expertune
steve.obermann@metso.com

Originally presented at the 2015 ISA Process Control & Safety Symposium at the Marriott Westchase in Houston, TX on Wednesday, November 11, 2015
LETTERS TO THE EDITOR

Send your comments on this newsletter to me at brad.carlberg@bsc-engineering.com or post a message to the ISA PUPID Technical Discussion Forum List Serve & “get something started”!

- You can reach the ISA PUPID Technical Discussion Forum List Serve by clicking this link PUPID email LISTSERV or by going to the PUPID microsite and clicking on Email List
  - ”
**Links to Related Websites**

**ISA Pulp & Paper Website**  
http://www.isa.org/~pupid/

**ISA Pulp & Paper Technical Discussion Forum**  
http://www.isa.org/scripts/lyris.pl?enter=pupid&text_mode=&lang=english

**ISA Technical Conference Session Schedule**  
http://www.isa.org/Template.cfm?Section=Conferences_and_Exhibitions&template=taggedpage/conferencesbydate.cfm&icid=61

**Pulp & Paper Research Institute of Canada**  
http://www.paprican.ca/  
TAPPI  
http://www.tappi.org/  
PIMA  
http://www.pimaweb.com/

**American Forest and Paper Association**  
http://www.afandpa.org/

**National Society of Professional Engineers**  
http://www.nspe.org/

**Swedish Royal Institute of Technology**  
http://www.pmt.kth.se  
http://www.hut.fi/English/

**Helsinki University of Technology**  
http://www.hut.fi/English/

**Technical Association of the Australian and New Zealand Pulp &amp Paper Industry (APPITA)**  
**Australian Pulp & Paper Institute**  

**ISO Standards Technical Committee List**  

**ISA Standards Committees Listserver**  
http://www.isa.org/shellcgi/lyris.pl?site=isa&page=topic&topic=standards+committees&text_mode=0&lang=english

**Quickies**

**ISA Pulp & Paper Technical Discussion Forum**  
Anybody (not necessarily an ISA or PUPID member) can subscribe to the PUPID Pulp & Paper Technical Discussion Forum. To subscribe, go to the PUPID homepage at http://www.isa.org/pupid/, select "Link to the PUPID email LISTSERV" in the pick box, click "Join", and enter you email address and a password.

**ISA Member Benefits**  
ISA members receive benefits such as the Latest Technical Information, Professional Development Resources, Networking Opportunities, Special Bonus for Student Members, Insurance Program for Independent Contractors and Business Owners, and other personal privileges. Go to http://www.isa.org/membership/membership-benefits/ to see specific benefits.

**ISA PUPID Calendar**  
Get a quick overview of ISA PUPID events by going to the Calendar at:  
https://www.isa.org/division/pupid/events/
## WORLD CORNERS

### CANADA CORNER

Nothing from anyone there this time!

### FAR EAST CORNER

Nothing from anyone there this time!

### EUROPEAN CORNER

Nothing from anyone there this time!

### FROM THE LAND OF THE MIDNIGHT SUN

Nothing from anyone there this time!

### CENTRAL & SOUTH AMERICAN CORNER

**From:** Carlos Mandolesi  
[mailto:carlos.mandolesi@sigmma.com.br]

**Sent:** Monday, October 26, 2015 6:25 PM

**To:** Brad S. Carlberg, P.E.  
<brad.carlberg@bsc-engineering.com>

**Cc:** Luiz Lamarque <lhfl@terra.com.br>; Rajendra Mehta <mehta.r251@yahoo.com.br>; D4 Marcílio Pongitori <mavp48@icloud.com>

**Subject:** Klabin - Project Puma

Hi Brad,

As I promised to you in Louisville:
See corporate presentations of Suzano and Fibria, two big Brazilian groups that have big new projects:

[Suzano Institutional Presentation.pdf](#)

[FIBRIA Corporate _Julho_Eng.pdf](#)

Also, see another project in Brazil: Klabin Puma Project:  

Atenciosamente/Regards/Saludos,

Carlos Mandolesi  
Vice President  
ISA District 4 (DVP)

[www.isa.org](http://www.isa.org)  
[www.isadistrito4.org.br](http://www.isadistrito4.org.br)

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## ANSWERS TO THE TUNING TIP

1. D
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3. C
2015 Pulp & Paper Industry Division Officers

Director
Rick Van Fleet
BTG
rick.vanfleet@btg.com
(602) 316-6774

Past-Director
Brad S. Carlberg, P.E.
BSC Engineering
brad.carlberg@bsc-engineering.com
(251) 454-1200

Director - Elect
vacant

Education Chairman
Patrick J. Dixon
Dixon Process Automation Services, Inc.
PatJDixon@DPAS-INC.com

Advisor
Richard E. Britton, P.E.
Retired – International Paper
richardbritton1@comcast.net
(251) 342-0998

Advocacy
Larry E. Wells, P.E.
CCSA, LLC
ccsallc@bellsouth.net

Programs / H&A:
vacant

Paper Review Coordinator:
vacant

Environmental Chairman:
vacant

Secretary / Treasurer:
Vacant

Standards & Practices:
vacant

ISA Pulp & Paper Industry Division
P.O. Box 12277
Research Triangle Park, NC 27709

ADDRESS CORRECTION REQUESTED