

The Society for Automation Instrumentation Measurement and Control RICHARDS BAY BRANCH

Volume 5, Issue 1 June 2013

Newsletter June 2013

June 2013 Technology
Evening Sponsored by



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May Technology Evening-Valve & Automation

The may technology evening on using wireless devices to monitor open/close positions of valves was presented by Karl Charvat of Westlocks Controls. The evening was kindly hosted by Valve and Automation and held at the Pelikan Inn in Birdwood. Karl Charvat highlighted the huge amount of unmonitored open/close valves installed in the industry. Karl pointed out that the highest percentage of installed valves are not monitored by a control system. Many of these valves are solenoid controlled via DCS/PLC or manual control but due to the high I/O count, cabling, wiring, cable, cabinet space to house I/O modules, field junctions boxes, feedback to control system was avoided. The

cost to install feedback is still a huge cost and becomes a practically more difficult in a plant that did not cater for the space requirements of Cables, racks, field junc-

The advancement of wireless technology now brings solutions to the industry which does provide an ability to get valve feedback at a better overall cost than a physical installation.



Mervyn Govender, Chairman SAIMC Richards Bay with Erick Wessels - Sales Engineer for Thermo

tion boxes, I/O modules and a costly set of new drawings.

Karl spent time going through the wireless technology options available in the industry. He introduced a wireless technology called ZigBee and went ahead to explain how this protocol

Can be used to create a wireless mesh. Some familiar terms such as routers and gateways was also mentioned and he explained how this was used to create a network around the plant.

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June Technology Evening- Endress+Hauser



Cédric Jeanneret, Head of Sales & Business Development - Flowtec, Switzerland was in the country and had an opportunity to present at the Richards bay technology evening on the new trends in flow measurement technology especially in the measurement of Hydrocarbons. The technology evening was held at Umhambi lodge on the 6th of June.

May Technology Evening-Valve & Automation cont.



Wireless Valve Monitoring System

FEATURES & BENEFITS

- Reduced costs (wires, conduits, cable trays, cabinets, I/Os)
- Easier engineering and installation
- Faster commissioning and startup
- Solution for space constraints, smaller footprint
- Monitoring for manual, automated, rotary or linear valves
- Improved operation efficiency and safety
- Multiple enclosure options (resin, aluminum, 316 SST)
- High visibility beacon and wireless valve monitoring (0 to 100%)
- 10 year battery life

He then explained how valve positioned wireless devices with same wireless protocol could connect onto this mesh network. The gateways then provided the status feedbacks received from the valve position feedback devices To be used by the control systems. It took some explaining about security standards over wireless to understand why this was a read only system and at present could not be used To actually drive valve output. The valve position devices used battery technology to power the elec-

tronics, the only cables required will be from the gateway to the process control Ethernet network.

The room was still very divided about use of wireless in industry even though the cost, safety and operational benefits was clearly acknowledged. It was very clear that the traditional C&I hardwired Or cabled bus systems is now being challenged by quick advances in wireless networking technology. More suppliers are

starting to embrace the technology by providing the various solutions. Understanding of wireless options, the difference between the wireless protocols, security over wireless and power consumption are technologies that we now have to embrace to provide The competitive value providing edge of our discipline in the industry.



Mr Pieter Becker (L), Handing over the Certificate to Brandon James (R).

New Members Issued with Membership certificates

Mr L Magaiza, Brandon James and Brightman Mdluli were presented with their SAIMC membership certificates. It was also noted that this new certificate was only valid to end year 2013. The chairman provided some feedback about the SAIMC membership status with the Automation

Federation, involvement with the ISA and how this



Mr Pieter Becker (L), Handing over the Certificate to Brightman Mdluli

benefits its members. A general overview was provided to all about the bosberaad held in Gauteng and for members to ready themselves to see some proposals for an alternate SAIMC logo. It was highlighted that the SAIMC was in a state of change and for members to expect changes.

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With its 14-inch diameter and accuracy up to 0.05%, the Promass 83X/84X four-tube Coriolis mass flowmeter is ideal for pipeline custody transfer and other high flow rate applications requiring reliability and low maintenance

Cedric started off by demonstrating the principle of operation of a single tube coriolis flow meter through a video. He then went on to introduce the world's first ever 14 inch coriolis flow meter employing 4 tubes, The Promass X, with an accuracy of up to 0.05% that can be used for custody transfer. This four-tube flowmeter is made of 316L stainless steel with secondary containment for in-

creased process safety, making it ideal for applications involving toxic or hazardous liquids or gases. The flowmeter has no moving parts, so maintenance is minimized. It operates in process temperatures of -58 to 356 °F (-50 to 180 °C), and in process pressures up to 1,440 psi (100 bar). Communication options include 4-20mA, HART, Profibus DP/PA, FOUNDATION Fieldbus or Mod-

bus. The flow meter can be used to measure among other things mass flow, temperature and density. Cedric explained the cost savings and its relationship to accuracy, especially when large flow rates are involved. He also compared the 4 tube coriolis with other technologies such and magnetic, ultrasonic, differential pressure meters, in terms of size, accuracy as well as turn down.

UPCOMING EVENTS

1. SAIMC GOLF DAY— 27 JULY 2013
2. AUGUST TECHNOLOGY EVENING, 8 August 2013 — ENDRESS+HAUSER (Energy Monitoring and Targeting in Utilities an Overall Strategy.
3. SEPTEMBER TECHNOLOGY EVENING, 5 September 2013— BECKOFF
4. TECHNOLOGY DAY- 10 October 2013
5. NOVEMBER TECHNOLOGY EVENING, 8 November 2013—PULSE CONTROL SYSTEMS

SAIMC GOLF DAY– 27 July 2013

GOLF DAY @ Richards bay Country Club



27 July 2013

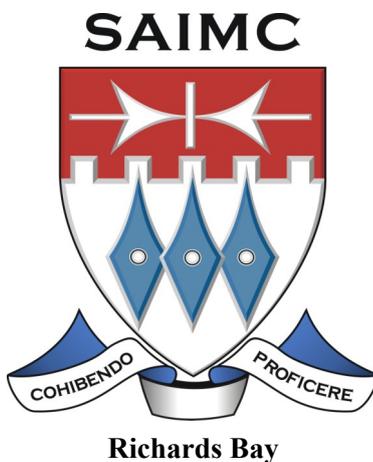
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