PROFINEWS

PROFIBUS & PROFINET news from around the world

PDF generated June 09, 2016 by Kalin's PDF Creation Station WordPress plugin

Table Of Contents

PI Australia hosts Global Meeting
Forum and Automation Innovation Summit 4
PI Annual Meeting News
Four Tips to Extend the Life of Your PROFIBUS Installation 9
PROFIBUS Early Warning System
Training - Focus on PROFIsafe
O-Link: Did You Know 18
Social Media Survey
Member News 20
Product News 24

PI Australia hosts Global Meeting

by Carl Henning - Tuesday, June 07, 2016

http://profinews.com/2016/06/pi-australia-hosts-global-meeting/

This year our Australian Regional PI Association had the privilege of hosting the 28th global chairmen meeting in Sydney Australia. Having the leading minds of PI's technology present, PI Australia organized a public event attended by PI's global leaders, technology users, Australian academics, and industry representatives. Australia is at the back end of a 20 year resources boom and transitioning away from a mining investment-based economy. Efficiency and productivity are essential to keep Australia competitive and the event contrasted global developments with our local needs. Our technologies are at the innovative forefront of IIoT and Industrie 4.0 and it was our ambition to start the dialogue between the major stakeholders to work towards an innovative mindset in our industry.

The event was attended by around 200 guests and firmly positioned PI as a "go-to" organization not only for communication technologies, but also to be part of a network of experts that aims at the systematic realization of automation innovation and the development of an innovative culture and mindset across the industry.

Hosting the global chairmen meeting was great for us to showcase to our peers what we in Australia are about. Organizing our Global Forum and Innovation Summit was one of the rare opportunities to highlight the influence of the global PI organization to the Australian public.



Rafael Koenig

Rafael Koenig

Chairman of PI Australia.

Forum and Automation Innovation Summit

by Carl Henning - Tuesday, June 07, 2016

http://profinews.com/2016/06/forum-and-automation-innovation-summit/

Insight into innovation, and a blueprint for the future

Attendees of the 2016 PROFIBUS and PROFINET Global Forum and the Automation Innovation Summit were inspired by an international roster of experts, learned about the role of Industrial Networks and innovation in their organizations, and gained new insight into the urgency of using automation to improve productivity.

The leading minds in PROFIBUS and PROFINET gathered in Sydney on 25 May 2016 for a knowledge-filled day of discussions around industrial networks, automation, and innovation.

Almost 200 attendees were at the Australian Technology Park to kick off the day with the PROFIBUS and PROFINET Technology Forum. They were in for a treat, as representatives from both PROFIBUS and PROFINET International and prominent Industrial Automation companies presented on their areas of expertise.

PROFIBUS and PROFINET Global Forum: technical expertise from around the world

Mathew Dulcey and Paolo Silva from Procentec covered diagnostics and network maintenance strategies, while the audience gained insight into how Industry 4.0 will impact on manufacturing worldwide, thanks to Karsten Schneider, PI Chairman and Martin Mueller, Global VP of Automation at Phoenix Contact, who spoke about how his company is integrating the technology into its production, and the results of that integration.

For attendees looking for the next step up in process automation, networking may be the key, says Karl Buettner, Marketing Manager at Endress+Hauser (Switzerland), who presented on the latest industrial network technologies.

Curious about how PROFINET as a technology works in today's large industrial networks? Professor Frithjof Klasen from the Technical University of Cologne, and owner of network services company AIT, showed the progressive development of PROFINET in expansive modern networks, that can contain tens of thousands of devices.

The morning would not have been complete without representation from Australia, with Andrew Brown, Fortescue's Lead Control Systems Engineer, providing a case study on how FMG's Solomon Mines is utilising PROFIBUS and PROFINET in their operations.

Automation Innovation Summit: the hows and whys of innovation

After a morning session full of information and inspiration from both local and international technical

experts, attendees were treated to an in-depth analysis on innovation and Australia's transition to a digital future.

Innovation will be key to Australian industries' continuing competitiveness on the global stage, so how can government and industry stimulate innovation, and create a pathway for higher productivity? And where do trends and technologies like automation, the Industrial Internet of Things and Industry 4.0 fit into this?

Representatives from industry associations, academia, and government were on hand to debate these pressing issues during the afternoon session at the Automation Innovation Summit.

Organizations interested in taking a systematic approach to building an innovation culture heard from Professor Sam Bucolo from the University of Technology in Sydney (UTS), who presented on Design Thinking as a way to foster innovation.

Professor Mark Dodgson from the University of Queensland gave an insight in critical stakeholder dependencies and contrasting practices in other global areas.

Representing and speaking to the engineers in the audience, Engineers Australia CEO Steve Durkin reflected on the critical role engineers will play in Australia's industrial innovation, while Jennifer Conley from the Australian Advanced Manufacturing Council (AAMC) emphasized the innovative possibilities within the local manufacturing industry.

Daniel Boland from the Small Enterprise Association of Australia and New Zealand explained how small and medium sized businesses can achieve rapid growth and flexibility by leveraging innovation.

To complete the presentations, Karsten Schneider, global PI Chairman, Michael Bowne from PI North America and Michael Freyny, Executive General Manager at Siemens Australia contributed with their experiences as system and technology experts in the field of automation.

Podium Discussion: consensus on collaboration

Following the individual presentations, the representatives then engaged in a podium discussion facilitated by Professor Chris Aldrich from the Curtin University, WA.

A key topic was the need for closer collaboration between academia, industry and government. International stakeholders compared the situation in Australia with their experiences back home.

The general consensus was that stronger guidance and long term vision was needed from the government at all levels.

The presenters also agreed that Australia needs to maintain the viability of manufacturing and to improve productivity in the mining industry — to do so will require greater innovation and the adoption of the tools used in Europe and the Americas, namely IIoT and Industry 4.0.

Conclusion

In explaining the ambitions behind the 2016 PROFIBUS and PROFINET Global Forum and the Automation Innovation Summit, Rafael Koenig, Chairman of the PROFIBUS and PROFINET Association of Australia (PAA) said that the event successfully connected technology leaders from around the globe with local technology suppliers, users, academia, and the automation and process control community.

At the same time, the event was able to leverage the international expertise to deliver real insights and action points for the local industry.

"The Automation Innovation Summit has given us a great starting point and flushed out view points and needs for us in Australia," said Mr Koenig.

"We can now build a network of relevant people and organisations, in order to continue contributing to the innovation process in Australia."

To provide a flavor of the content presented, here is Karsten Schneider's presentation from the PROFIBUS & PROFINET Global Forum:

https://www.youtube.com/embed/aA-XULujr7E

These additional videos are available:

- Mark Dodgson
- Stephen Durkin
- Prof Klasen
- Chris Hoey
- Matthew Dulcey
- Rafael Koenig

Around the venue (Click to enlarge and start slide show):						
The Forum speakers:						
The Summit speakers:						

PI Annual Meeting News

by Carl Henning - Tuesday, June 07, 2016

http://profinews.com/2016/06/pi-annual-meeting-news/

Regional PI Associations (RPAs) from around the world gathered for their annual meeting in Sydney Australia and stayed to support PI Australia's PROFIBUS & PROFINET Global Forum and Automation Innovation Summit (reported here). The PI annual meeting provided a platform to learn about technology developments and exchange ideas. The hosts provided several venues for the meeting, allowing the attendees to see a bit of Sydney as they moved between venues.

Topics included PROFINET, PROFIBUS PA, and IO-Link. Presentations of some RPAs highlighted the individual markets and activities in South Africa, Poland, Japan, Australia, Korea, USA, and Germany.

IO-Link. Several interesting developments are in the works for IO-Link to be announced at the SPS/IPC/Drives Show in November. Provision has been made for non-members of PI to participate in the increasing adoption of IO-Link, including mandatory certification testing and rules for use of the logo. It was reported that the automotive industry is increasingly using IO-Link.

PROFIBUS PA. There are now 88 case studies for PROFIBUS PA on the website http://www.profibus.com/nc/technology/case-studies/ and select "PROFIBUS PA Technology").

PROFINET. A preview of coming documentation and resources for diagnostics and grounding/shielding was provided. Work continues on showing the role of PROFINET in Industrie 4.0 and Industrial Internet of Things. Announcements will be forthcoming. A new four-minute video was released showing the ease with which PROFINET can be added to automation devices:

https://www.youtube.com/embed/EKJ9VTB8tAI

Some short highlights from some RPAs around the world:

Korea. Recent seminars in Seoul and Busan covered "PROFINET, backbone of Smart Factory & Industry 4.0." Presentation by PI Chairman Karsten Schneider preceded details of PROFINET technology, IIoT gateways, and live demos.

Poland. PROFINET is widely used in the extensive Polish automotive industry. PI Poland has participated in an automotive conference and is planning their own Industrie 4.0 conference. There are extensive partnerships with Polish universities.

Japan. PROFIBUS PA is the primary technology for PI Japan in their process-centric market although they have recently certified seven PROFINET devices. All DCS vendors have PROFIBUS connectivity although they may not advertise the fact. IO-Link is catching on in Japan.

USA. The cornerstone of PI North America activities are the seventeen PROFINET one-day training

PROFINEWS

PROFINET & PROFIBUS News

classes. MinutePROFINET videos continue to be ver	y popular, being vi	iewed 5,000 time	es per month.
Targeted advertising is being run.			

Next year's meeting is expected to be in June in China.

Four Tips to Extend the Life of Your PROFIBUS Installation

by Carl Henning - Tuesday, June 07, 2016

http://profinews.com/2016/06/four-tips-to-extend-the-life-of-your-profibus-installation/

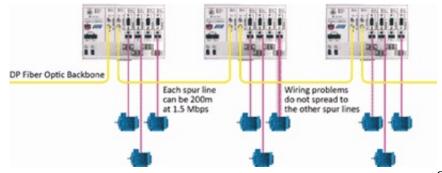
During the last few years, industrial communication systems based on Ethernet (PROFINET mainly) have spread immensely. Transitions toward innovative technologies require huge investments: purchase of new field devices, new cabling and higher-performance processors. For many companies, the investment in new protocols is not a real necessity and can be postponed by investing in the existing plant.

But what are the tricks to extend the life of an existing PROFIBUS network? And what kind of investments are required?

1- Follow the 'PROFIBUS Installation Guideline for Cabling and Assembly' rules, defined by PI International.

Basically this means:

- Check the installation of active terminations at the end of each segment and check the related power supply. Some devices have their own integrated terminations; however, we recommend including active terminating resistors to avoid any issues when disconnecting a device from the power supply or when it is taken out of the network. The price of an active termination depends on the brand and its characteristics, however it is a relatively small investment.
- Respect the cabling rules (i.e. the one-meter rule) and use certified PROFIBUS cables. Remember that cables are subject to wear and tear and ensure that cables are not too close to EMC-sensitive areas (e.g. power cables or motor drives).
- Make sure that the PROFIBUS connectors are properly connected.
- To avoid interference and disturbances, remember to separate the segments with disturbances using repeaters or Fiber Optic. EMC interferences can damage the plant, limiting its functioning and reliability, increasing the costs related to maintenance or troubleshooting.
- Check if any configuration error occurs.



Spur lines through multichannel

repeaters

2. Adequate technical training

Every company should have at least one Certified PROFIBUS Engineer or Certified PROFIBUS Installer working. A Certified Engineer should keep up-to-date with the latest innovations and changes in the fieldbus technology. For example, in the last few years some PROFIBUS rules have been outdated by some recent innovative products launched on the market. In some regions, needed investments in technical training is paid by public funding or allowances.

Only trained technicians can easily understand the reasons of malfunctioning or solve issues that happen in their networks. Engineers who do not know the rules of PROFIBUS will often try to solve issues using the wrong instrumentations and spend money on unsuitable solutions. For instance, checking the information provided by the PLC does not suffice, similar to replacing cables or devices when these are not the reason of the malfunctioning.

The big question now is what is less costly:

- Not investing in training and risking a wrong or inappropriate decision.
- Spending a limited amount of money for Certified Training and have the right people for the job with the specialist knowledge to always find the best solution.

3- Recurring diagnostic activities.

Diagnostics of the PROFIBUS network requires a protocol analyzer and an oscilloscope. ProfiTrace combines those functionalities in a single mobile tool. Many Competence Centers and experts use this powerful tool worldwide. Auditing the PROFIBUS network is important to find errors or issues.

At the end of the audit, it is important to generate a report with the analysis of the protocol and an overview of the issues and data at a certain moment. If an issue occurs only sporadically and it is hard to detect, we recommend installing a permanent monitoring tool for predictive maintenance. Due to these kind of tools, the company can save the money typically spent on safety protocols and maintenance work in the field.



Oscilloscope image

4- Ask a PROFIBUS expert!

A PROFIBUS expert can provide technical support on site and check the health of the network, suggesting the right solution to a problem.

The experts have all the specialist knowledge and tools for repairing breakdowns directly on-site, usually in less than one day. After the testing phase, the experts provide a report with the protocol analysis and give specific recommendations on how to improve the quality of the network.

In conclusion... these four tricks require moderate investments and provide solutions to extend the life of a PROFIBUS installation, avoiding downtimes and high costs for urgent troubleshooting and maintenance. Many companies have experienced downtimes and breakdowns costing thousands per hour. This can easily be avoided with moderate expenditures by following the four tips in this article.



Evelyn Mario

Managing Director

PROCENTEC Italy

PROFIBUS Early Warning System

by Carl Henning - Tuesday, June 07, 2016

http://profinews.com/2016/06/profibus-early-warning-system/

Corrugated Board à la Carte – Intelligent PROFIBUS early warning system prevents production losses

Even modern fieldbuses like PROFIBUS are unable to maintain their perfect post-installation condition indefinitely. Some "aging" is inevitable and this could eventually lead to bus faults and costly production losses. These problems can be avoided by continuously monitoring the PROFIBUS networks. The Softing solution deployed at the Aschaffenburg paper mill delivers benefits that receive the "thumbs up" from its staff.

Established almost 150 years ago, the DS Smith paper mill in Aschaffenburg is one of the oldest in Europe, but because it has been regularly modernized and equipped with the latest technology, it is still able to satisfy the highest customer expectations and meet a wide variety of technical specifications. The paper mill's most popular product is low basis weight corrugated paper, which the company has been producing from 100% waste paper since 1990. The company's paper machine can produce up to 1,400 meters of paper, 7.53 meters wide, every minute, giving the paper mill in Aschaffenburg an annual production capacity of 400,000 metric tons of high quality paper.

Preventing Production Losses



Figure 1: The paper machine is controlled via a

PROFIBUS network

This output capability is possible thanks to a high level of automation throughout the paper mill which, in addition to the paper machine itself, comprises a waste paper treatment area, a biological wastewater purification plant, a water treatment plant, a waste incinerator, and a gas and steam turbine power plant. All of these areas are linked by a central process control system. One of the keys to this system is the seamless data exchange handled via PROFIBUS. This fieldbus offers the benefit of robust digital data transmission. It is worth remembering, however, that even if an installation has been carried out properly,

the operating reserves for the fieldbus communication will gradually decrease in normal operation, which can eventually lead to serious communication problems. This may be due to EMC influences, or a broken connector or a faulty bus terminator, which is often caused by oxidation. No matter what the cause, the consequence will be unexpected production downtimes resulting in high financial losses.



Figure 2: TH LINK PROFIBUS can be integrated without interfering with the operation of existing installations and requires very little additional space in the control cabinet.

The Aschaffenburg paper plant had their share of these problems. But DS Smith refused to accept the situation and in 2009 decided to fix it once and for all by continuously monitoring the status of the PROFIBUS networks. The first step was to define their current requirements: the solution adopted should not interfere with the systems already installed in the paper mill and should not add to the staff's workload.

Solution Ready for Immediate Use

Having decided upon their requirements, DS Smith asked a number of vendors to demonstrate their equipment designed for continuously monitoring the PROFIBUS network. They then proceeded to test this equipment intensively over a period of several weeks. As a result of these tests, the TH LINK PROFIBUS solution from Softing Industrial Automation was selected for use in the mill.

TH LINK PROFIBUS is installed in a control cabinet (see Figure 2). It provides controller-independent access to PROFIBUS networks, as shown in Figure 3. TH LINK PROFIBUS requires no special configuration tools and can be integrated into a system without interfering with existing installations, and without having to power the system down. What is more, there is no need to change the bus addresses and no need to adapt the control program.

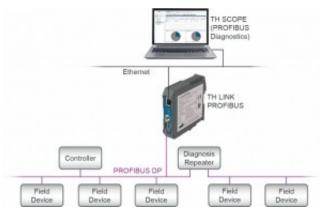


Figure 3: TH LINK PROFIBUS provides additional controller-independent access to PROFIBUS networks including functionality for continuous monitoring

One of the key benefits is the continuous network diagnostics via passive listening to the PROFIBUS frames. This measures cycle times and can detect critical events including the number of frame retries or message retransmissions, restarts of PROFIBUS stations, device faults and diagnostic messages. This data enables timely conclusions to be drawn about the status of the bus communication and impending faults – while the PROFIBUS network itself is still working properly. This data can also be used to quickly produce a "good/bad" statement about the operational status of the equipment by comparing it with individually definable limits, such as the maximum number of frame repetitions. Any specific data can be accessed via an integrated web server connected to a central process control system, thus eliminating the need for on-site checks. TH LINK PROFIBUS can also provide intelligent troubleshooting support based on this data as well as statistics to help optimize network configuration. Another useful feature of TH LINK PROFIBUS is its ability to automatically send an email as soon as the PROFIBUS communication quality changes from "good" to "bad."

A key factor in DS Smith's decision to choose TH LINK PROFIBUS for its paper mill in Aschaffenburg was that the tool is not an active station in the PROFIBUS network and therefore does not change communication behavior, but simply monitors telegram traffic passively. Other important considerations for DS Smith were the ease of installation and that Softing's solution did not require the installation of additional software.

Successful installation

As soon as testing had been concluded in September, 2009, the first two TH LINK PROFIBUS devices were installed in the Aschaffenburg paper mill. Soon afterwards, in November, DS Smith placed an order for 15 additional units to enable continuous monitoring of all the paper machine's PROFIBUS networks as well as the waste paper treatment plant and the biological water purification plant. The result was convincing: "Because TH LINK PROFIBUS now alerts us in advance to potential problems that we can fix while the plant is still operational, we have been able to reduce the paper machine's downtime considerably," says Joachim Gutjahr, Head of Automation Technology at the Aschaffenburg paper mill. "This has enabled DS Smith to reduce its losses significantly."

Since the company began using TH LINK PROFIBUS, it has continually expanded the monitoring system, with the result that all of the paper mill's PROFIBUS networks – a total of about 40 units including secondary installations – are now being monitored. DS Smith has also been using Softing's TH

SCOPE diagnostic software since 2013 to support the PROFIBUS diagnostics and preventive maintenance function and to obtain a summary of the monitoring results of all the PROFIBUS networks. This solution provides an in-depth presentation and analysis of all diagnostic data and requires no specialist knowledge.

Since the solution was chosen and the first units installed, Wolfgang Gross, a planning and automation engineer in the Automation Technology department, has been responsible for the operation of the TH LINK PROFIBUS in the mill: "I particularly appreciate the email alerts on potential problems. These enable me to maintain a detailed overview of the communication performance of all our systems at all times from my office without having to go out and check each PROFIBUS network individually. This user-friendliness confirms that our choice of diagnostic solution was the right one. And during all of this time, our experience of Softing has been very positive."

Authors:

Dr. Christopher Anhalt, Senior Product Manager Diagnostics, Softing Industrial Automation GmbH Dipl.-Inform. Georg Suess, Operational Marketing, Softing Industrial Automation GmbH

15 / 26

Training - Focus on PROFIsafe

by Carl Henning - Tuesday, June 07, 2016

http://profinews.com/2016/06/training-focus-on-profisafe/

PROFIsafe is growing rapidly and PI is providing multiple classes to educate users, machine builders, and device makers in the benefits of this technology. Educational opportunities range from webinars to certification classes. Two PROFIsafe-specific classes are scheduled in Germany with the certification class offered only in English.

User Workshop

PI Germany has scheduled a PROFIsafe User-Workshop for machine builders and device manufacturers in Bruchsal, Germany July 5th, 2016. The workshop is hosted by SEW EURODRIVE.

Over 5.1 million bus nodes use PROFIsafe and the tremendous growth of the past years confirms PROFIsafe as a leading safety field bus communication system that enables many new functions in fieldbus modules. Besides reducing wiring, it enables a much higher flexibility and availability within systems. Life cycles can be greatly extended when safety is correctly considered and implemented.

A highlight of the workshop will be the presentation of the interoperable live demo that displays the functionality of PROFIsafe technology as well as a micro trade show which allows manufacturers to engage with machine builders in a new setting.

The workshop is held in the German language and participation is free of charge. For more <u>information</u> and <u>registration</u>.

PROFIsafe Certified Designer Training

The required quality of PROFIsafe products and systems highly depends on the quality of the know-how of the development teams and on the deployed methods and procedures. An adequate range of trainings can assure the necessary level. Thus, the responsible PI working groups in cooperation with TÜV developed a training scheme, which is available to all PI members in charge of PROFIsafe and safety. This three-day session includes a written test at the end of each day. Experts having passed all tests will receive a TÜV certificate 'Certified PROFIsafe Designer.' The training should be repeated every third year in order to continuously keep the knowledge up-to-date. The second PROFIsafe and safety training activity in 2016 takes place from October 11 to 13, 2016 in Karlsruhe/Germany in the English language. The attendance fee is 500.00 €, excluding VAT. Registerhere.

Webinars



PROFIsafe – Functional Safety over PROFIBUS and

PROFINET

This webinar explains how PROFIsafe meets the requirements for conducting safety functions over PROFIBUS and PROFINET. It also briefly describes how I/O and PLCs are designed to send and receive safety information.

Drive Safety

Prior to the introduction of PROFIsafe, drive/motor safety meant removing complete power from the drive. And if coasting was a hazard: adding an external brake. Sadly, that may not have been the safest action to take. It may be safer to maintain a certain torque level to hold a web in position, for example. Or it may be safer to move the shaft so the machine went to a safe position. Now, these safety states and others can be achieved. To discover these other drive safety states, watch our Drive Safety webcast.

PROFIsafe is also covered in North America in <u>PROFINET one-day training classes</u>. For a full list of all classes worldwide visit <u>here</u>.

17 / 26

IO-Link: Did You Know

by Carl Henning - Tuesday, June 07, 2016

http://profinews.com/2016/06/io-link-did-you-know-15/

Did you know that IO-Link is superseding the nameplate?

Every IO-Link device contains all of the relevant details about the device. Not only are the item number, date of manufacture, and firmware or hardware edition stored but it is also possible with device profiles to distinguish the equipment type, e.g. whether it is a pressure switch or a proximity switch. Even the layout of the process data or the structure and thresholds of the IO-Link device-specific parameters are accurately described by the IODD (IO Device Description) file. In addition, machine or plant-specific information can be stored in the device by the user.

Of particular interest is that it is possible to ensure that only suitable sensors and actuators are used in a processing machine. In this way, many machine suppliers guarantee a certain precision or service life, though this can only be assured with genuine components. If a retrofitted sensor does not have this specific identity, the automation system can reject this sensor due to the IO-Link data.

The advantage of this integrated nameplate is as clear as day. In the event of an error, all of the requisite information for device identification is available right at the machine and in direct relation to the diagnostic message. For sensors and actuators without IO-Link, the service team first has the task of searching for this information in the documentation or circuit diagrams. If, on the other hand, the device features IO-Link, the equipment and location can be quickly identified and an exchange performed in next to no time.

IO-Link			

Social Media Survey

by Carl Henning - Tuesday, June 07, 2016

http://profinews.com/2016/06/social-media-2/

PI is active in social media. We are networking to the core. That means networking a manufacturing line, as well as networking with colleagues around the globe. PROFIBUS and PROFINET help network your factory, while social media helps network PI with our customers. What social media channels do you use? Take our short survey!

There are three YouTube channels, six Twitter accounts, two LinkedIn groups, and the PROFIblog. MinutePROFINET videos are viewed 5,000 times per month. There are over 2,000 Twitter followers. The LinkedIn groups are active. Hundreds of visitors read the PROFIblog every month.

But...

What about you? What is your experience with social media for business? Is there another network out there that you use?

Let us know

Please take our <u>short survey</u> to help us focus on getting you information where you want it. (Less than three minutes to complete.)

Member News

by Carl Henning - Tuesday, June 07, 2016

http://profinews.com/2016/06/member-news-3/

PI North America members Beamex and HARTING are in the news this month along with Germany's Indu-Sol. Beamex has scheduled two calibration-focused events for the process industry, one for technicians and engineers and one for managers and executives. HARTING's new product MICA (Modular Industry Computing Architecture) won the HERMES AWARD at the opening ceremony of Hannover Fair. Indu-Sol presents an appraisal of the status of industrial networks across technologies and countries.

Beamex

The International Society of Automation (ISA) and its Strategic Partner for Calibration, Beamex, Inc., announce the opening of attendee registration for Calibration Best Practices: Interactive Workshop, which will be held Thursday, 18 August 2016 at the Space Center Houston in Houston, Texas, USA and the Strategic Automation Leadership Conference, which will be held Wednesday, 12 October 2016 at ISA headquarters in Research Triangle Park, North Carolina, USA.

The jointly sponsored events will explore the latest insights, trends and best practices for process plants seeking to improve calibration quality, safety, accuracy and efficiency. Techniques for managing smart advanced technologies, like PROFIBUS PA, will be addressed. Instructors will discuss day-to-day challenges and how best to solve them through new and innovative strategies and advances in calibration technology—all designed to save time while achieving quality metrics and improving safety.

Best Calibration Practices: Interactive Workshop

Strategic Automation Leadership Conference

HARTING

The HARTING Technology Group has won the coveted HERMES AWARD for the second time, garnering the prize on Sunday evening in Hannover. The company beat four other competitors with its HARTING MICA (Modular Industry Computing Architecture), the company's mini-industrial computer. The family-owned company had previously picked up the prestigious prize in 2006 for an RFID solution. The Hermes prize is awarded by the Deutsche Messe.



"The HERMES AWARD is the world's most important innovation prize for industry. We are very excited about this important victory. It highlights the innovative capacity of our engineers and developers", explained Philip Harting, CEO of the technology group. The presentation of the nominated innovations and the award took place as part of the festive opening ceremony of the exhibition on Sunday in the presence of German Chancellor Angela Merkel and US President Barack Obama. The prize was presented by Prof. Dr. Johanna Wanka, Minister of Education and Research.

Read more

Indu-Sol

Secure and stable networks form the basis of high performance industrial communication. The only chance for their longevity is that they remain in perfect working condition. Is this currently the case?



Image 1: VORTEX 2016

VORTEX 2016 (Image 1) for the first time delivers a comprehensive appraisal of the status of industrial networks across technologies and countries. This knowledge base is the result of a total of 677 measurements, for which Indu-Sol was commissioned in 2015.

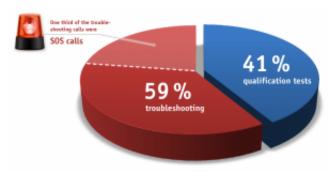


Image 2: Qualification tests and troubleshooting



Image 3: Reason for use by technology (+ Chart

Calls/Share)

On the basis of 400 fault diagnoses and 277 field tests for checking the proper installation and stability of communication (qualification tests, Image 2), a clear picture emerges: Factors in the production environment as well as the duration of operation of machines and systems, often extending into several years, which are equipped with proven technologies such as PROFIBUS are already resulting in symptoms of "old age" (Image 3). In order to continue to guarantee their operational availability, it is necessary to provide for the permanent monitoring of the network status for early identification of any degradation in quality of telegram traffic.

For more recent technologies such as PROFINET, the focus among other things is on the issue of an advantageous network structure as required by efficient data communication and also on the selection of the best update rate according to one's own purposes. Moreover, there is strong demand for information across all technologies on guaranteeing the electromagnetic compatibility of industrial machines and systems.

The large number of field tests depicts one portion of the worldwide market for products and services offered for the maintenance of industrial networks, and this market is growing continuously – especially considering developments towards Industry 4.0. In light of this, the mission at present and for the future is: In order to guarantee global economic competition, comprehensive solutions must be available which are able to ensure the long-term stable functioning of the lifelines of our industrial communication. This process and its effects will also play an important role in future issues of VORTEX, which from now on will be released annually.

Download VORTEX or browse online at http://www.indu-sol.com/en/products/catalogue-request/#VORTEX

PROFINEWS

PROFINET & PROFIBUS News

23 / 26

Product News

by Carl Henning - Tuesday, June 07, 2016

http://profinews.com/2016/06/product-news-4/

Molex has introduced its SST PB3-CPX Modules to connect Rockwell Automation CompactLogix L2, L3 and L4 controllers to PROFIBUS DP-V0 and DP-V1 Networks. Janitza electronics announces the UMG 96RM, a measuring device for energy measurement technology - certified for PROFINET and is suitable for PROFIenergy. Wieland Electric samos PRO COMPACT gateway include PROFINET I/O and PROFIBUS DP.

Click the headline for details.

Molex PROFIBUS module for CompactLogix



Molex has introduced its SSTTM PB3-CPX Modules to connect Rockwell Automation CompactLogix L2, L3 and L4 controllers to PROFIBUS DP-V0 and DP-V1 Networks. The modules enable high-performance, low-cost solutions for industrial automation applications and are compatible with Master DP-V0 Class-1; Master DP-V1 Class-1 and Class-2; and Slave DP-V0 protocols.

SSTTM PB3-CPX Master/Slave Modules can be configured as PROFIBUS Master, Slave or Master/Slave, delivering a flexible design that reduces inventory and spares. The modules are easy to spec in and offer up to 1,984 input bytes and 1,968 output bytes per master, making them suitable for large PROFIBUS networks.

Janitza electronics multifunctional measuring device



The UMG 96RM is a very compact and powerful multifunctional measuring device for energy measurement technology. The new UMG 96RM-PN model is certified for PROFINET

and is suitable for using PROFIenergy.

As a multifunctional network analyser, the device offers features that are unique in this class: It does not just capture electrical consumption data and standard values but also power quality values such as harmonics up to the 40th harmonic. A further highlight is integrated residual current monitoring (RCM), which can be used to detect insulation faults at an early stage. This increases the system availability and reduces the risk of fire.

Wieland Electric samos PRO COMPACT

The Profinet protocol is directly integrated into the samos PRO COMPACT SP-COP-ENI modules. There are also corresponding Gateway modules available for Profibus-DP, and other fieldbusses. Communication project planning is realized via samos® PLAN5+, the graphic programming tool from Wieland Electric.

PROFINEWS

PROFIBUS & PROFINET news from around the world

PDF generated June 09, 2016 at 5:26 PM by Kalin's PDF Creation Station WordPress plugin