

# PROFINEWS

PROFIBUS & PROFINET news from around the world

PDF generated May 03, 2016 by Kalin's PDF Creation Station WordPress plugin

## Table Of Contents

<b>Global Networks</b> .....	3
<b>Hannover Fair Report</b> .....	6
<b>2015 PI Node Count: Extraordinary Growth</b> .....	7
<b>PROFINET and TSN Close Ranks through Industrie 4.0</b> .....	8
<b>New Documents and Videos - May 2016</b> .....	10
<b>Training Update - May 2016</b> .....	13
<b>Intelligent Communication Networks in the Application of Industrie 4.0</b> .....	15
<b>IO-Link: Did You Know</b> .....	19
<b>Regional News - May 2016</b> .....	20
<b>New Products - May 2016</b> .....	22

## Global Networks

by Carl Henning - Tuesday, May 03, 2016

<http://profinews.com/2016/05/global-networks/>

The only path to functioning networks in the context of Industrie 4.0 is by way of standards. They ensure a smooth information flow within the production process. That is why PI works closely with other organizations to advance usable and reliable solutions. This is illustrated with three examples from the past year.

It normally takes time until a cooperation agreement yields actual technological results. PI sets the pace here.

### Intensified partnership

In the upcoming months, the OPC Foundation and PI will collaborate even more closely than before. The experts from PI expect that OPC UA (Unified Architecture) will be an essential building block for Industrie 4.0, in particular when it comes to data exchange with devices such as operator stations via the controller level. Or for production data from devices to corporate IT, especially in an environment with different providers. The service-oriented architecture of OPC UA becomes the link for the non-deterministic communication between different types of nodes of these levels and between levels. PROFINET takes over the transmission of deterministic real-time data and control-relevant acyclic data in automation systems. PROFINET and OPC UA are therefore already a perfect complement to one another today because PROFINET allows open communication based on TCP/IP in parallel without additional expense. Example: automation of a screwdriver control in real-time using PROFINET. Quality data such as tightening torques can then be transmitted to the quality management systems over the same cable via OPC UA.

### Proven cooperation

Evidence of successful results from close collaboration between different organizations in the field of industrial automation can already be seen in the development of FDI technology. Even if the objectives of the FDI Cooperation LLC have been achieved, the important task of establishing FDI technology on the market still remains. FieldComm Group, FDT Group, OPC Foundation, and PI will therefore share in the maintenance and further development of the FDI Specification. Another supporting element for the market dissemination of FDI is provision of tools and components for efficient product development. For support of device manufacturers in the integration of FDI in their devices, a cross-protocol development environment (Integrated Development Environment, IDE) has been provided, which enables efficient development, testing, and generation of FDI Device Packages as well as low-cost transfer of existing EDD into an FDI Device Package. Device manufacturers can use this to create FDI Device Packages for PROFIBUS, PROFINET, Foundation Fieldbus, and HART devices using uniform processes. Another important result for FDI is the definition of an architecture for FDI host components that enables consistent processing of device integration packages in various FDI hosts. The resulting implementation of such a component should serve as a reference for host manufacturers when implementing FDI in their

tools. The further development and maintenance of the IDE and FDI host component will be carried out in close collaboration between the FieldComm Group and PI.

## **Global cooperation**

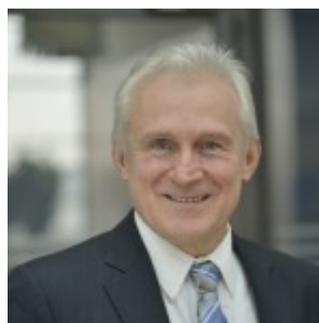
Besides the successful collaboration in the process industry, another important collaborative activity in the production industry was wrapped up. CLPA (CC-Link Partners Association) and PI want to replace gateways that are currently often needed between CC-Link IE and PROFINET networks with standardized interfaces. Regardless of which network is present in an installation, users will be able to easily integrate devices and components of CC-Link IE in PROFINET, and vice versa, in the future. To convert the results of this cooperation into real technology, two standardized technical gateway solutions are contemplated: coupler solution and link solution.

*Coupler solution:* This solution covers the communication between machines or systems. For example, an Asian machine builder might want to be able to sell a machine including a controller with CC-Link IE to a customer in Europe that uses a PROFINET network, or vice versa. For this purpose, the machine with one network is connected to the other network via a coupler as a kind of black box, thus as though a conventional network component were involved. Cyclic data exchange will function as usual. The acquisition of machine data or system data is acyclic on PROFINET or with SLMP on CC-Link IE. The configuration of this coupler, basic engineering, device profile handling, and network management can be carried out as usual. Complicated data transfers are not required here.

*Link solution:* This solution is aimed at easy integration of devices, e.g., when a drive in one network is to be connected to a controller in another network. In this case, users can rely on the seamless cyclic data exchange process. Device information is also acquired acyclically or with SLMP, same as with the coupler solution. The configuration, basic engineering, device profile handling, device addressing, and network management can be carried out as usual. Network status and acyclic data are indicated as before.

These solutions will enable very easy integration of machines and various systems into existing networks. Moreover, users can select from a wide variety of devices, systems, and machines, which gives them maximum freedom and significant cost savings in the planning of their networks.

**Conclusion:** Partnerships, especially those that result in technology, always mean added value – for users and manufacturers alike. Over the long-term they not only save money but also provide new outlooks when considering new markets as well as interesting future concepts of Industrie 4.0.



*--Peter Wenzel*

*Executive Director*  
*PI Germany*

---

## Hannover Fair Report

by Carl Henning - Tuesday, May 03, 2016

<http://profinews.com/2016/05/hannover-fair-report/>

The Hannover Fair is the largest industrial trade show. Each year a partner country is featured with this year's partner being the USA. Not surprisingly, attendance from the USA reached an all-time high at 5,000 out of the 190,000 attendees. PI had its own booth on the red carpet tour route.

With the theme "Integrated Industry – Discover Solutions" the fair showcased Industrie 4.0 and digitalization. These themes could be seen from the 5,200 exhibitors, over half of which were from companies outside of Germany, actually from 75 countries outside Germany. Five hundred and twenty five of the exhibitors were from the USA.

Also attending from the USA was President Obama with whom Germany's Chancellor Merkel opened the fair on Sunday and toured the fair on Monday. This marked the first time a US president has attended the fair.

Here is a look around the fair with photos provided by Hannover Fair (click to enlarge and start slide show):

### PI Booth

The fair provided a "Red Carpet Route - Automation & IT: How you benefit." Along the route was the PI booth with the theme "PROFINET - backbone of Industrie 4.0." This was supported with details of PI's vision for Industrie 4.0 and the Industrial Internet of Things. Featured walls included PROFINET, process, PROFIsafe, IO-Link, and vision. The PI Lounge provided a venue for networking and refreshment.

Some quick facts about the booth:

- 215 sq. meters (2314 sq. ft.)
- 86 co-exhibitors
- Factory Automation Wall with 97 devices
- Process Automation Live Demo with 52 Devices
- PROFIsafe Live Demo with 22 devices
- IO-Link Wall with 175 devices
- 21 company kiosks.

## 2015 PI Node Count: Extraordinary Growth

by Michael Bowne - Tuesday, May 03, 2016

<http://profinews.com/2016/05/2015-pi-node-count-extraordinary-growth/>

The annual determination of the installed base of the portfolio of PI (PROFIBUS & PROFINET International) show a significant growth in market acceptance. The numbers for PROFINET and PROFIsafe are particularly strong. IO-Link is also exhibiting a strongly accelerated growth. The somewhat leveling-off growth of PROFIBUS and simultaneous surge of PROFINET is evidence that Ethernet-based communication is starting to replace conventional fieldbus technology in production automation. In contrast, PROFIBUS is trending strongly in process automation markets.

Three million PROFINET devices were brought into the market in 2015. The total number at the end of 2015 was 12.8 million devices, which represents a 30% increase in the installed base over the previous year. In the case of PROFIsafe, 1.3 million nodes were brought into the market in 2015, increasing the installed base by more than 30% to a total of 5.5 million PROFIsafe nodes. IO-Link experienced the greatest increase this year with 63% growth. The total number of installed IO-Link devices is now more than 3.6 million. A total of 2.8 million PROFIBUS devices were brought into the market in 2015.



Karsten Schneider, Chairman of PI, views the latest accounting of node counts very positively. "For the first time in the history of PROFINET, its numbers exceed those for PROFIBUS. This demonstrates the positive trend for the PI technologies, not least because Industrie 4.0 means that the future belongs to Ethernet systems. With its total number of well over 50 million, PROFIBUS is the absolute world market leader. Beating a world market leader is an art. And the fact that this was done – for the first time over this past year – by PROFIBUS's in-house competitor PROFINET is an unmistakable sign that the future belongs to our technologies." "Another sign of the strength of our communication technologies is the rapid growth of PROFIBUS in process automation," said Schneider. In 2015, 900,000 devices were installed in this realm. The total number now exceeds 10 million devices. This accomplishment represents another milestone.

"Our community has worked hard for success in the past, and the challenges of Industrie 4.0 will continue to propel us. PI will confront upcoming future challenges in order to ensure long-term success."

## PROFINET and TSN Close Ranks through Industrie 4.0

by Carl Henning - Tuesday, May 03, 2016

<http://profinews.com/2016/05/profinet-and-tsn-close-ranks-through-industrie-4-0/>

At the end of last year, PI (PROFIBUS & PROFINET International) established a new "I4.0" working group with the goal of preparing use cases relevant for Industrie 4.0 from the perspective of industrial communication. On this basis, existing and new technologies will be assessed from the standpoint of use in Industrie 4.0 production systems and the standardization environment will be analyzed. The working group will identify requirements for communication that are important in the Industrie 4.0 environment and bring them to standardization consistently as further development of PI technologies.



As one of the first results, a new sub-project is now being started for specific measures for the merging of IT (Information Technology) and OT (Operations Technology). IT networks and production networks are increasingly growing together. In the past, however, they were always identified by different characteristics. For example, IT networks mainly handle large bandwidths and connect different locations, while production networks mainly feature high performance and short latencies. With TSN (Time Sensitive Networking), technologies are now being developed in the IEEE that will connect the bandwidth of IT networks with the latency of OT networks.

A distinction of PROFINET is that it relies on standard IT technology while satisfying stringent real-time requirements. PI sees a large opportunity to combine the strengths of PROFINET and TSN and to generate further added value from this for customers, thereby setting PROFINET on a future-oriented foundation for Industrie 4.0. The combination will also yield versatile use of new TSN-capable standard Ethernet blocks for manufacturers of PROFINET devices. Proven PROFINET services, profiles, and user interfaces, such as diagnostics, alarms, PROFIsafe, and PROFIdrive remain unchanged for the user. PROFINET already provides a very good starting position for the use of TSN mechanisms. The convergence of real-time-capable traffic with IP-based traffic, which will increase significantly in Industrie 4.0 applications, is already firmly anchored in the PROFINET architecture today. In addition, new ideas discussed in the IEEE, such as establishment of real-time-capable dynamic ad-hoc connections, can be integrated. PROFINET is thus a consistent participant in the further development in the IEEE.

For this reason, PI will actively advance the further development of TSN and point out ways this technology can be used in PROFINET networks. In doing so, special attention will obviously be given to a seamless transition for today's installations so that users have an easy path to TSN-based networks. First

results of the working group can be expected at SPS/IPC/Drives 2016.

Other topics such as the use of OPC UA and expanded access to asset management data are also needed for implementation of Industrie 4.0 applications and are being actively advanced by the I4.0 working group.

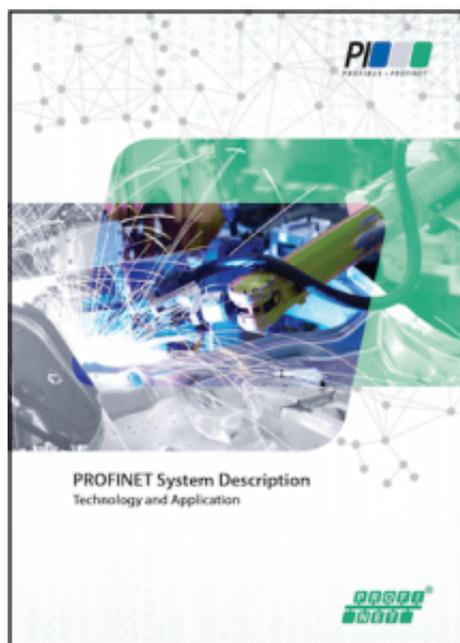
---

## New Documents and Videos - May 2016

by Michael Bowne - Tuesday, May 03, 2016

<http://profinews.com/2016/05/new-documents-and-videos-may-2016/>

Can't make it to one of the hundreds of PROFIBUS or PROFINET training events going on around the world? Need a point of reference at the tip of your fingers? Many new documents are available, some with important updates.



### PROFINET System Description

The PROFINET System Description is *the definitive piece of literature* on PROFINET. It starts out at a high level and eventually works its way down into the technical details of the technology. It is a **MUST READ** for anyone -from the mildly interested to the advanced user.

[Click Here for the PROFINET System Description](#)



## PROFIsafe System Description

One of the major events within the lifetime of the PROFIBUS and PROFINET International (PI) community was the first release of a specification for safety communication in 1999. It caused a quantum leap in possibilities in the world of automation. Since then, PROFIsafe has evolved into the leading safety communication technology in the world. It is the objective of this document to provide a thorough insight into the PROFIsafe technology without becoming too engulfed in specific details. It is not meant to replace standards or official specifications. PROFIsafe is approved by both the IFA and TÜV.

[Click Here for the PROFIsafe System Description](#)



## PROFINET Design and Implementation

### Guideline

Developing a PROFINET device or adding a PROFINET interface to an existing device? In either case this guideline will help. In addition, it contains advice and recommendations, all in the vein of a best practices approach. It makes no difference whether the reader already knows PROFINET or is totally new to the subject. This guideline is comprehensive in addressing the mechanics, hardware, software, project management, product management as well as marketing aspects and highlights what is important.

[Click Here for the PROFINET Implementation Guideline](#)

And an accompanying video:

<https://www.youtube.com/watch?v=EKJ9VTB8tAI>



### **Marketing Flyer: IO-Link**

This is a short, 8 page brochure that gives a quick overview of the IO-Link technology. IO-Link is not a new field bus, but rather a point-to-point connection between a peripheral module and an I/O field device. It is based on the familiar 3-wire connection for a digital switching signal, whereby the signal is implemented as a serial telegram. In this way additional information in the form of a serial protocol between the I/O level and the field device can be exchanged.

[Click Here for the IO-Link Marketing Flyer](#)

## Training Update - May 2016

by Carl Henning - Tuesday, May 03, 2016

<http://profinews.com/2016/05/training-update-may-2016/>

This issue spotlights the 29 global certified [PI Training Centers](#) (PITCs) in 19 countries: Australia, Belgium, Brazil, Canada, Chile, Czech Republic, France, Germany, Ireland, Italy, Netherlands, Norway, Poland, Saudi Arabia, South Africa, Spain, Switzerland, UK, and United States. PITCs train engineers and installers in courses ranging in length from one day to week-long. PITCs can be certified to teach Certified PROFIBUS Engineer, Certified PROFIBUS Installer, Certified PROFIBUS PA, Certified PROFIBUS Designer, Certified PROFINET Engineer, and/or Certified PROFINET Installer courses.

Engineers and installers successfully passing theoretical and practical exams at the end of classes are awarded certified engineer or installer status. The names of successful engineers and installers are published on the PI website.

PITCs are accredited by PI. In order to become accredited, PITCs must apply to PI and meet the following criteria:

- Be a full member of a "parent" Regional PI Association (RPA) and have the RPA's support
- Accept and comply with the PITC Quality of Services Agreement
- Provide a positive accreditation report of an independent expert appointed by PI covering the same scope the PITC candidate is applying for -the expert has to visit the PITC candidate personally
- The accreditation is valid for the PITC only together with a valid certification of its Instructor(s)

Class outcomes are applied equally across all PITCs. So students can be sure that their certification is globally recognized.

---

## Workshop in Germany

PI Germany has scheduled a PROFINET technology workshop for developers and product managers in **Frankfurt am Main on 23 June 2016**. Here's an abstract:

As a leader among the Industrial Ethernet systems, PROFINET is a standard technology in automation. Its development enables rapid and cost-effective implementation in different applications. This requires an extensive range of products from multiple manufacturers. The implementation is simple and efficient for all. The aim of the workshop is to provide information about the ways to develop PROFINET products and to identify implementation options. Leading technology houses provide their possibilities of development assistance in a small micro fair.

The workshop is held in German language and participation is free of charge. For more information and registration: [www.profibus.com/profinetfrankfurt](http://www.profibus.com/profinetfrankfurt)

There are other kinds of training offered by the various PITCs and Regional PI Associations. These include IO-Link workshops, free PROFINET one-day training classes, and more. For a full list, visit the [training web page](#) where you can filter by country and technology.

---

## Intelligent Communication Networks in the Application of Industrie 4.0

by Michael Bowne - Tuesday, May 03, 2016

<http://profinews.com/2016/05/intelligent-communication-networks-in-the-application-of-industry-4-0/>

*Are new technologies needed for implementation of Industrie 4.0? Not necessarily. Rather, it is a matter of toughening up existing technologies so that they can meet future requirements. Profinet is already well-prepared for this because of the important groundwork laid by PI (PI (PROFIBUS & PROFINET International)).*

Whether Industrie 4.0, the Internet of Things, or Big Data – the close networking of automation components, machines, facilities, and IT systems needed for this is only possible with standardized and integrated communication. At the same time, simple and modular solutions are a top priority of users. In addition, seamless integration of device and production data in business systems is needed, for example, for use of advanced analytical methods. Ethernet-based networks have proven to be especially well-suited for this in both the production world and business world. Advancements in communication technologies have proceeded differently in the two worlds, however. Obviously, the production world places a higher demand on reliability, environmental conditions, real-time behavior, and robustness than the business world.

Nevertheless, the different versions do not have to be set in stone. There is a real chance that a common model can be developed that meets the majority of requirements of both worlds. From the perspective of the production world, some of the most urgent tasks are development of significantly improved cyber security, formal description of application functions such as measuring and controlling, and assurance of a high degree of interoperability. To meet the challenges of Industrie 4.0, today's system architectures must also be significantly improved. This must take into account the increased digitization of devices and processes and the higher data volumes that are generated by smart field devices. The trend toward decentralization and associated increased bandwidth requirements for networks must also be taken into account. Another important aspect is the standardization of software and hardware based on existing and expanded standards.



If these tasks can be completed, Industrie 4.0 offers a real opportunity for operators and users. Based on well thought-out Ethernet concepts, a better understanding can be achieved for production processes, which will enable lower costs and increased productivity. For example, data acquisition will be made much easier, allowing this data to be available for asset management applications and the like.

## **Reliable information exchange**

There's no need to reinvent the wheel for this – on the contrary! Ethernet-based Profinet represents one example of how an existing technology can be enhanced for future Industrie 4.0 applications.

Profinet uses the TCP/IP protocol suite without any limitations or changes. Automation-specific tasks such as device parameter assignment, configuration, network diagnostics (SNMP) are handled via the TCP/IP channel. For remote IO and drive applications with stringent speed and deterministic behavior requirements, TCP/IP with its extensive overhead data and long stack throughput times is not sufficient. To overcome these problems, the experts of PI have added an extra real-time (RT) channel for real-time communication of time-critical data. While standard Ethernet hardware and corresponding network components (switches) are used with this method, datagrams are prioritized in switches using priority tagging according to IEEE. This enables deterministic response times in the range of 0.25 to 10 milliseconds and opens up Ethernet for completely new industrial applications.

The RT channel is used for real-time communication with other remote IOs and additional Profinet field devices. Since Ethernet and wireless LAN are both based on the IEEE 802.xx series of standards, Profinet can be easily expanded for wireless communication via access points.

Profinet also includes an isochronous real-time (IRT) channel for high- performance motion control

applications, such as for coordination of hundreds of axes with accuracy to the microsecond. Profinet with IRT provides additional hardware support in the form of standard Profinet ASICs to enable a very high degree of synchronization. Reserved time windows are used to transmit datagrams in a reliable cyclic sequence, while the remaining cycle time is used for standard TCP/IP communication.

## Good Communication Requires Collaboration



Another obvious challenge faced by Industrie 4.0 is that new market participants, technologies, and tasks will constantly emerge. To ensure sustainable interoperability under these conditions, a common set of standardized methods must be developed. The objective is for products to be able to interact with one another while allowing companies enough leeway to develop their own profiles for their products. The various committees, professional associations, and industry associations must collaborate closely to develop a common strategy here. A few examples will illustrate this:



Industrie 4.0 will adopt OPC UA (Unified Architecture) as its service-oriented architecture. Experts believe that this technology will be the basis for the development of Industrie 4.0. PI and OPC Foundation have been working cooperatively for years. This cooperation is being intensified to enable integration of OPC UA into the system architecture of Profinet. Corresponding work has already begun. The plan is to use existing general services developed specially for Industrie 4.0 on the basis of OPC UA.



PI is also currently working on solutions for condition monitoring. Based on the reference model for condition monitoring of the German engineering association VDMA (Verband Deutscher Maschinen- und Anlagenbau), PI is defining a communication profile that enables access to condition monitoring via Profinet.



The IEEE "Time Sensitive Networks (TSN)" Task Group is also currently working on improvements to real-time behavior. When the technology becomes available, PI will test the conditions under which use of TSN in industrial networks will be advantageous and the extent to which TSN can be integrated in Profinet.

## Markets and Outlook

More than a decade after the market launch of Ethernet, the fog has lifted exposing the market positions of the five leading industrial Ethernet protocols. According to analyses by ARC, Profinet took over the leading position in 2013 in terms of the number of industrial Ethernet devices with a particular protocol. In general, ARC forecasts significant growth in the industrial Ethernet market. The acceptance of industrial Ethernet has grown significantly in recent years, and ARC expects an annual increase in device sales of almost 20 percent. If the average sales price falls slightly, a doubling of the market in the next 5 years is expected. As market leader, Profinet would likely benefit from this growth phase.

Although work on Industrie 4.0 has just started, the dynamics of the ideas and concepts unleashed by this work in the process industry is impressive. A new awareness has been raised for a common IT-driven vision for the future of the production world. One thing is clear: To reap the benefits of Industrie 4.0, manufacturing companies must rethink their IT strategies and take the new requirements of a truly information-driven company into account. This includes applications at the corporate level for business planning and execution as well as applications for production that serve as a source of information from production processes. A well thought-out automation architecture with future viability will determine whether Industrie 4.0 is also sustainable.

***--Peter Wenzel***  
***Executive Director***  
***PI Germany***

---

## IO-Link: Did You Know

by Carl Henning - Tuesday, May 03, 2016

<http://profinews.com/2016/05/io-link-did-you-know-14/>

### **Did you know that IO-Link is regarded as a facilitator for the diagnostic concepts of Industrie 4.0?**

Industrie 4.0 is loaded with high expectations. If it is to become a reality, data and information from the sensor/actuator level must be made accessible. IO-Link makes an important and essential contribution toward reaching this valuable data by providing communication capability to the last meter to the field device.

Diagnostic information is exchanged between the IO-Link master and device using events, which consist of an event qualifier and event code:

- The event qualifier differentiates between messages, warnings, and errors. A distinction is made here according to standard diagnostics and device-specific diagnostic information.
- Annex D of the IO-Link specification contains a plain text description of each standard event code. Typical examples of such standard diagnostics are overtemperature and undertemperature, overvoltage and undervoltage messages, short-circuit, and wire break as well as general hardware and software errors.

As a gateway, the IO-Link master maps the IO-Link events to the specific diagnostic and alarm mechanisms of the respective fieldbus. By means of the IODD of the IO-Link device, every engineering tool is able to provide an associated plain text description for device-specific diagnostics as well. This is supplemented by diagnostic messages that the IO-Link master generates. For example, a wire break between the IO-Link device and master is signaled by the master as an interruption of communication with the controller.

Thanks to the detailed and differentiated diagnostic information on the part of IO-Link, an intelligent condition monitoring down to the sensor/actuator level is possible for the first time – a crucial step towards innovative Industrie 4.0 concepts.

## Regional News - May 2016

by Michael Bowne - Tuesday, May 03, 2016

<http://profinews.com/2016/05/regional-news-may-2016/>

### Brazil

#### Seminars at Ambev, Klabin, and Anglo American

*Associação Profibus Brasil* promoted an on-site seminar at yet another Ambev plant, this time at Cervejaria Adriática, located in Ponta Grossa, PR. Being one of the newest Ambev plants, Cervejaria Adriática had its startup one year ago, in May 2015. Today there are a total of 400 employees and it produces brands like Brahma, Skol, Antártica and, in the near future, Budweiser. There are also plans to start production of a new beer, the Adriática Beer. Cervejaria Adriática employs both PROFIBUS DP and PROFINET technologies.

The Klabin plant in Telêmaco Borba, PR, also received a training seminar. The audience consisted of 30 professionals that take part in the PUMA Project, one of the largest cellulose plants in the world. Like with other classes the morning consisted of theoretical presentations, while the afternoon revolved around practical demonstrations.

Engineers, managers, supervisors, and technicians from Anglo American took part in a seminar held in São João da Barra, RJ. Of note was the lecture of Eduardo Quintão, from Maintenance Engineering of Anglo American. He presented a general overview of Anglo American's PROFIBUS networks. PROFIBUS DP is used for the actuators and drives (14 DP networks) and Profibus PA is used in the instrumentation (78 instruments on 9 segments).

---

### Australia

On **May 25, 2016**, be on the front row at the **Automation Innovation Summit hosted by Profibus Australia**, as industry leaders, government representatives, policy makers and researchers engage in vigorous debate about the Innovation Statement, and the impact it will have on the industrial automation sector.

The Innovation Statement has created a renewed sense of optimism and excitement throughout the business community. But as with any government policy, questions remain to be answered. The debate and panel discussion will look at key issues such as:

- How can industry, business, politicians, and R&D organizations and institutions work together to bridge the gap between research and commercialization?
- While start-ups are exciting and important, what policies and programs can the government enact to provide better support for established small-to-medium sized enterprises and manufacturers?
- How can industry and politicians come together to address the short-term challenges facing the

Australian industry, such as the current skills shortage and the continual bleeding of jobs?

What practical innovations can SMEs take on, to create new client experiences, improve performance, and kickstart a new era of smart productivity?

**Learn More:** [profibusaustralia.com.au](http://profibusaustralia.com.au)

---

## Netherlands



In the port of Rotterdam, with one of the largest petrochemical clusters in the world and a large network of offshore companies, we see immense adoption of Industrial Communication networks.

Talks include:

- *Industrial Communication in the Process Industry*
- *Flexibility in the Harbor by Creative Design*
- *The Right Signal to in the Process Field*
- *PROFIBUS in Potentially Explosive Environments*
- *Carefree Instrument Replacement in PROFINET*
- *IO-Link: Point to Point*

On the 9<sup>th</sup> of June, **PI Netherlands** is organizing a short workshop about the possibilities for using Industrial Communication in the process industry. You can eliminate downtime and bring maintenance time to a minimum by integrating networks like PROFIBUS and PROFINET. These are some of the many benefits to be discussed.

**Learn More:** [profibus.nl](http://profibus.nl)

Meanwhile back in March, PI Netherlands participated at the "Industrial Ethernet" event, also in Rotterdam. Topics included the Industrial Internet of Things, VPN tunneling, the safe use of WiFi, remote access, optical fiber cabling, and Defense in Depth network security.

---

## New Products - May 2016

by Michael Bowne - Tuesday, May 03, 2016

<http://profinews.com/2016/05/new-products-may-2016/>

*Click on a headline or picture below to learn more about the product.*



### [Modules Receive ATEX Zone 2 Certification](#)

**Acromag** has expanded their signal conditioning and Ethernet Remote I/O offering in the European Union with the addition of ATEX hazardous location certification. The certification complements the existing UL/cUL Class 1 Div2 approvals for Acromag's BusWorks XT Series that feature a PROFINET interface.

---



### [New PROFINET / IO-Link Masters](#)

**Control** has announced the release of three new IO-Link Masters for PROFINET. The newest additions come in either IP67 or IP20 variants, and support the latest IO-Link 1.1 standard. Additional features include an embedded webpage allowing for IO-Link devices configuration, ISDU (Indexed Service Data Unit) handling, and device/data validation.

---



### [4-Port Managed PROFINET Switch](#)

**System Helmholtz** has introduced a compact 4-port-managed PROFINET switch. Functions such as LLDP, DCP, and diagnostics can be administered via web interface, Telnet, SSH, or USB. The device complies with PROFINET Conformance Class B and features MRP Client capability for ring redundancy.



[PROFINET Interface for Weighing Terminal](#)

The IND780 weighing terminal from **METTLER TOLEDO** now can interface with PROFINET networks for seamless data exchange. Most existing weighing installations using the IND780 can be upgraded to PROFINET connectivity. This allows business to extend the lifetime of their weighing equipment as their network technology is modernized.



[Easy Startup of SafetyBridge Components](#)

By using the FES (Flash Easy Safe) Basic and FES Pro SD cards from **Phoenix Contact**, SafetyBridge components can be started up even more easily. SafetyBridge allows for functional safety requirements up to SIL 3 or PL e without using a safety controller. In the Pro version, process and diagnostic data are provided via PROFINET to other applications, by means of a communication module.



[Flexible Communication Through Modular Controller](#)

**Siemens** has widened the possible uses of the Simatic ET 200SP distributed controller with the three new communications processors. These processors give the controller an additional Industrial Ethernet and PROFINET interface, with which the user can implement flexible communication solutions. This simplifies the integration of series machines in IT networks.



### [Industrial Notebooks for Automation Engineering](#)

**Siemens** has equipped the latest generation of its rugged, ready-to-run industrial notebooks with a multitude of practical functions for mobile engineering. The new Simatic Field PG M5 has all the interfaces required for the engineering onboard: one PROFIBUS and two PROFINET interfaces for connection to the automation process, as well as four USB 3.0 interfaces.

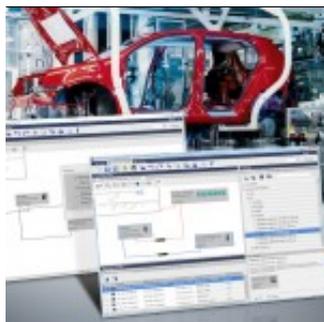
---



### [Sinamics DCP with High Power Rating](#)

The Sinamics DCP DC power converter from **Siemens** extends the scalable power range achievable with a parallel connection up to 480 kilowatts. A PROFINET interface is available as an option to connect to an industrial network. The high switching frequency enables smaller reactors to be used, giving the unit very space-saving dimensions.

---



### [Planning and Simulation Tool for PROFINET Networks](#)

**Siemens** is launching a new software tool on the market for the design and simulation of PROFINET automation networks. The Sinetplan network planner from Siemens is aimed at plant designers, constructors, and operators and supports them from the planning stage, through commissioning to the operation of a PROFINET communication network.

---

## **PROFINETS**

### **PROFIBUS & PROFINET news from around the world**

PDF generated May 03, 2016 at 11:45 PM by Kalin's PDF Creation Station WordPress plugin