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(In Acrobat, for your convenience, we have linked the above headlines to their respective pages. Just click the 'hot spot')

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PROFIBUS IS AUTOMATION TECHNOLOGY

13th PI Meeting, Beijing

19 representatives from 11 countries came together end of May in Beijing for the 13th PROFIBUS International Chairmen's meeting. These meetings take place at least once per year to allow representatives of the Regional PROFIBUS Associations (RPA) to come together to clarify and define international strategies and common projects.



At the meeting, Edgar Küster, Chairman of PROFIBUS

International, pointed out that the power of PI lies in its rich offering of innovative technology and international strength. Also, he said: "PROFIBUS is more than just a fieldbus; PROFIBUS *is* Automation Technology".

Küster reminded delegates that PROFIBUS offers many advantages, including technological leadership, system competence, implementation potential, plus 'internationality'. "And that means GLOBAL LEADERSHIP," he said, adding that more than 300 experts are working on the further development of PROFIBUS and PROFInet in more than 30 Working Groups worldwide, all open to PI members.

Today, PI is represented by

23 Regional PROFIBUS Associations

having more than 1,140 members. "All these organizations offer products, services, support, seminars and much more for PROFIBUS, or they already use PROFIBUS in their plants," Küster said. "In addition, more than 20 PROFIBUS

Competence Centers worldwide act as a point of contact for technical questions. Thus, it is not surprising that more and more studies show clear market leadership for PROFIBUS." (For more about China, see Page 6.)

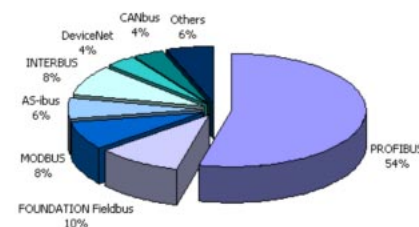


LEADING FIELDBUS

Frost and Sullivan's latest report confirms PROFIBUS as the leading fieldbus technology. The study, called European

Fieldbus Market for Process Industry, gives PROFIBUS 54% market share, with other systems achieving between 4% and 10%. Further details of the study are available from

Fieldbus Systems Market:
Percent of Revenues by Fieldbus Type (Europe), 2001



Source: Frost & Sullivan www.profibus.com

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Standardization expert Ludwig Winkel outlines some of the key reasons why Standards are so important.

Standards are intended to provide a neutral base for free competition. PROFIBUS International (PI) provides *de facto* standards; IEC, ISO, CENELEC, etc. provide *de jure* standards. The International Electrotechnical Commission (IEC) and International Standardization Organization (ISO), are the leading global organizations which prepare and publish international standards for all electrical, electronic and related technologies. These serve as a basis for national standardization and as references when drafting international tenders and contracts.

IEC/ISO's standards are vital since they also represent the core of the World Trade Organization's Agreement on Technical Barriers to Trade (TBT), whose 100-plus central government members explicitly recognize that international standards play a critical role in improving industrial efficiency and developing world trade. The

number of standardization bodies which have accepted the Code of Good Practice for the Preparation, Adoption and Application of Standards presented in Annex 3 to the WTO's TBT Agreement underlines the global importance and reach of this accord.

For the key technologies of PI it is beneficial for the businesses of PI-members to refer to *de jure* standards, especially in global markets and when competing with other technologies. The following PI technologies are in preparation to become international standards:

» The PROFIBUS Physical Layer (PhL), protocol and services in Application Layer (AL) and Data Link Layer (DLL) are part of the drafts **IEC 61158:Ed3** series and **IEC 61784:Ed1**.

» PROFInet runtime specification is part of the drafts **IEC 61158-series:Ed3** and **IEC 61784-1:Ed1**.

» The PROFIBUS PA technology is under consideration within the project **IEC SC65C WG7** with the project number **IEC 61804-series**. Part 2 contains the conceptual model of the Function Blocks (FB) used in the PROFIBUS PA Profile specification, and the

» Electronic Device Description language (EDDL) specification is in the drafts of **IEC 61804-2** together with Function Blocks, and parallel in **EN 50391** without FB.

» The Communication Feature List (GSD) is proposed as part of the standard **ISO 15745-3**. The responsible working group of this draft standard is **ISO TC184 SC5 WG5**

More information about the international standardization efforts of PI are available from www.profibus.com.

» GENERAL NEWS

SEMINAR SUCCESS

MESCO Engineering's DP-V2 seminar in Lörrach was greatly appreciated and well-attended, says the company. They brought clarity to the specification jungle and provided participants with a guide to the new functions of PROFIBUS. More seminars will be run again after the summer break. **Mesco:** steffi.elschner@mesco.de or www.mesco.de

UK LAUNCH

GDL Automation has enhanced its PROFIBUS offering and now claims to provide system-wide support, including interconnects, drives and encoders. They are exclusive agents for the Deutsche Automation UNIGATE PROFIBUS modules, which make it simple to integrate PROFIBUS. **GDL:** gwingate@gravatom.com or www.gdl-automation.co.uk

WE CAN MAKE YOU VISIBLE

... by ensuring that you profit from an optimal global presence. The PROFIBUS.com website is aimed at the international automation and communication technology sector. It has about three million visits a year. Why don't you profit by advertising? [Contact info@profibus.com](mailto:info@profibus.com)

GUIDELINES

Test Specifications for PROFIBUS DP-V2 Master and Slave Devices are available free for members to download from

www.profibus.com, or can be obtained (order no. 2.322) from info@profibus.com

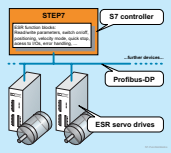
The Application Guideline for **HART on PROFIBUS** is also available for free members' download from www.profibus.com or can be obtained (order no. 2.312) from info@profibus.com

EVENTS ...

...and many other important dates and news from the world of automation are listed on the PROFIBUS website. Browse "News & Events" at www.profibus.com Visit it today!

» PRODUCT GALLERY

SERVO FUNCTION BLOCKS



A library of function blocks is now available for integrating ESR servo drives into Simatic S7 controllers over PROFIBUS. Functions include process data, parameter communication, positioning or velocity and I/O access. Blocks follow the PLCopen specification based on IEC 61131-3. **ESR:** info@esr-pollmeier.de or www.esr-pollmeier.de

ETHERNET, QNX, AND MORE!



Steinhoff has three new PROFIBUS-capable products. The first is a PROFIBUS DP/DP-V1 master in a 100Mbps Ethernet gateway (pictured), running under QNX. The second is a platform-independent configurator with embedded SQL database for GSD files. The third is a 'cluster-enabled' PROFIBUS DP master for Ethernet UDP. **Steinhoff:** www.steinhoff.com or info@steinhoff-automation.com

MANOMETER/ PRESSURE



Skotselv Instrumentering from Norway has introduced its first PROFIBUS PA products: IT 316/316 PBPA is a combined manometer and pressure transmitter with an analog gauge (*is this a first? Ed.*) and TT PBPA is a new temperature transmitter for Pt100 elements. Both are Ex-certified. **Skotselv Instrumentering:** hl@skotselv-instrumentering.no or www.skotselv-instrumentering.no

DIGITAL LOADS



Eilersen Electric Copenhagen, Denmark and Neuchatel, Switzerland have a range of patented load cells for direct connection to PROFIBUS. All systems are completely digital, from sensor to bus. The output from each cell may be transmitted directly in Kg with status codes. **Eilersen Electric:** www.eilersen.com

NEW PLUG RANGE



New Subcon-Plus D-Sub plug range from Phoenix Contact offer angled or axial cable entry, with or without integrated programming interface and with either spring cage or screw terminal blocks. It is now possible to use the fast insulation stripping tool for PROFIBUS cable, type A. **Phoenix Contact:** +49 5235 330983 or pisaak@phoenixcontact.com

POWER

Hawke Route-Master has been approved by Factory Mutual to provide IS power and field connections for Class 1 Division 1

Groups A/B/C/D PROFIBUS devices. Already certified to CENELEC EEX ia IIC, it can drive around 4 times the usable current of comparable devices, all within IS standards and without the FISCO limitations. Hawke offers a FREE Segment Capability Calculator, and an Entity Parameter Calculator. **Hawke Fieldbus:** fieldbus@hawke.com or www.ehawke.com

DEVICE TYPE MANAGERS



ICS has developed Device Type Managers in accordance with the FDT 1.2 specification for PROFIBUS PA Profiles (pressure, temperature, digital output etc.), either as finished device drivers or in Source Code for the implementation of manufacturer-specific DTMs. **ICS:** +49(0)7243 71270 or info@icsgmbh.de

QUALITY MANAGEMENT



CANDEO's new version 2.0 Scripting Host quality assurance software automates the development, testing and setup of DP-V1, PA or FDL devices. Its built-in Test-Engine relies on an open script language and comes with a graphical debugger. It's highly customizable, uses XML and provides HTML views. **CANDEO:** +49 89 18911503 or www.candeo.de

SCOPE 3.0



Trebing & Himstedt's PROFIBUS latest Scope 3.0 renders commissioning, diagnosis, troubleshooting and monitoring of PROFIBUS networks even more easy. It has a new visual network display. Network Quick-Check enables users to provide immediate analyses. Reader-mode software distribution is licence-free. **Trebing + Himstedt:** www.t-h.de

ETHERNET GATEWAY



FieldGate provides 10/100BASE-TX connectivity for up to 3 PROFIBUS networks, making it possible to link the IT world with production lines easily. FieldGate can be used for network configuration, device parameterization, diagnosis and production data acquisition, from a PC or control center. It is self-configuring and has an integrated Web server. **Softing:** www.softing.com

IP67 AND ROBOTIC I/O



Simatic ET 200eco distributed I/O block is for use directly at the process. 'T' functionality permits hot-swapping. Simatic ET 200R is for taking PROFIBUS DP down to the welding tong on robots but is equally suited to any EM-polluted environment. **Siemens:** www.siemens.com/simatic-dp

►► PROFIBUS APPLICATIONS

DENMARK/ DIGITAL DOSING



The largest dairy group in Europe, Arla Foods has built a state-of-the-art wastewater treatment system at Rødkjærsbro, Denmark.

A steady and reliable flow of information is critical for the wastewater treatment system and essential for the factory's operation. A failure in the treatment process will bring cheese production to a very expensive standstill

for 24 hours.

With Grundfos Digital Dosing pumps and PROFIBUS, Arla Foods have a solution that gives a reliable flow of information and full control over the whole system. Early warning signs are now seen long before critical levels are exceeded. At the same time the dosing pumps are so precise no matter how high or low the dosage that there is no waste of chemicals.

There are six dosing pumps altogether. Four of them, dosing ferric chloride, are controlled by phosphorus sensors, which are also connected to the network. **Grundfos:** www.grundfos.com/dosing

UK/ DAIRY PRODUCTS

Invensys APV at Crawley, UK have recently won an order in excess of 8 million Euros for the supply of a complete new Dairy Process facility to produce milk, flavoured milk and cream. The project includes raw milk silos, two pasteurizers, finish milk tanks, a flavoured milk extended shelf life (ESL) plant, aseptic tanks and two CIP systems. The control system is an Invensys Intelligent Integrator, an industrial PC with InControl running under Windows NT. PROFIBUS I/O is used and an InTouch SCADA system is employed. **Invensys:** dave.gibb@invensys.com

RUSSIA/ OIL



Russian companies RTSoft in Moscow and "Nefteautomatika" (Ufa) have completed the development and put into operation a distributed control system for oil extraction in the Yarainerskoye oilfield in the western part of Siberia (Sibneft Noyabrskneftegaz). The complex provides the acquisition and processing of the oil pumping station, guarantees the safe operation of the equipment and increases the efficiency and convenience of the working process of technical and operating staff. The DCS is based on PROFIBUS-networked controllers. Efficiency, authenticity and reliability served as the criteria for the choice of this network class. The transmitted data includes 600 input/output parameters. The automation complex is built with SMART/VME9000 controllers from PEP Modular Computers), ISaGRAF from CJ International and InTouch from Wonderware. **RT Soft:** maria@rtsoft.msk.ru

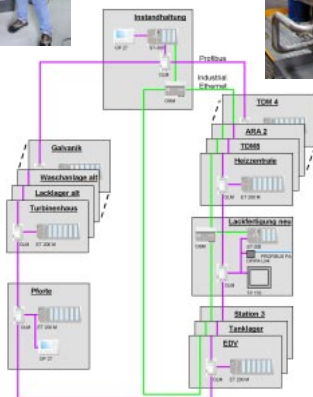
GERMANY/ FOILS

PROFIBUS and Ethernet are helping HUECK FOLIEN produce high-quality printed foils for the packaging industry. When lightning destroyed the plant's fault alarm annunciation system in 2000, Hueck's electrical department built what was originally intended to be a stopgap fault alarm annunciation system out of eight Simatic ET 200 distributed I/O stations and a Simatic S7-315 programmable controller. The fact that the PROFIBUS could be configured in Step 7 made the project much easier.

Net modules maintain communication in the 'opposite direction', using special logic in the OLMs, in fractions of a second. PROFIBUS was the perfect choice for handling alarms and control. Another reason was the ability to work with PROFIBUS PA in hazardous environments.



HUECK specialists networked the Si-



matic S7-300 controllers over Industrial Ethernet. This is optimized for data interchange at the shop-floor level, and makes it possible to link the production environment to the office world. At the moment, only the Simatic controllers are exchanging data this way, but engineers are already thinking about networking other devices, "Our new system brings many benefits", says Norbert Specht, responsible for sub-contracted electrical and electronic supplies and services. "If measuring = knowledge, many items of data can now be collected and evaluated. We are going to do a lot of new things in this direction". guenther.m.baumann@siemens.com

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 automation information

» FOCUS ON ... REGIONAL PROFIBUS ASSOCIATIONS

RPA AIMS TO BE BEST KNOWN ASSOCIATION IN BRAZIL



In the second of our series of features about regional PROFIBUS Associations, Cesar Cassiolata explains the aims of the Brazilian organization. If you thought Netherlands and Belgium had a busy schedule (see previous issue) then take a look at the work load of our South American colleagues.

PROFIBUS in Brazil is growing each day. PROFIBUS already is a success for manufacturing and during the last two years its influence in the process automation industries has become very clear.

Association PROFIBUS Bra-

zil was founded in 1999 and today has the following members: Alfa, Altus, Atos, Festo, Hellermann Tyton,



International Fair of Electric and Instrumentation, March 2002

IFM Electronic, Kron, Moeller Electric, Murr Elektronik, Parker, Pepperl+Fuchs, Samson Endress+Hauser, Schneider, Sense Sensores, Siemens and smar.

The Board aims to expand its membership amongst

universities, students, system integrators and anyone related to control automation. The main aim is to broadcast the 'professionalism' of this association and to become the best known association in the Brazilian market.

Since 2000, Association PROFIBUS Brazil has organized seminars, workshops and training sessions. Up to now, more than 1000 people have attended RPA Brazil seminars.

The Association is present at major Brazilian fairs, where vendor members show their "Interoperability Laboratory" concept, which accepts the challenge of demonstrating device interoperability live to visitors. Visitors can choose any combination of devices to test the concept ... which always is a success! Another important activity is the publications in regional monthly magazine including technical articles, product and member information and general

THE PEOPLE

Paulo Camargo of Siemens (President)



Cesar Cassiolata of smar (Executive VP)

Nelson Felizzola of Altus (Treasurer VP)



Silas Anchieta is the Association Executive Support.

PROFIBUS advertising. The main aim is constantly taking PROFIBUS to the Brazilian automation community to enable users to meet new automation challenges.

Have your PCC featured in PROFInews: send articles and information to the editor at the address on Page 6.

BRAZILIAN SCHEDULE - 2002

- » March 21 - São Paulo, with more than 170 persons.
 - » May 24 - Porto Alegre, with more than 85 persons.
 - » June 27 - Recife city.
 - » August 1 - Campinas city.
 - » September 4 - Rio de Janeiro city.
 - » September 19 - Ribeirão Preto city.
 - » October 17 - Location Curitiba city.
 - » November 28 - Location Belo Horizonte city.
- The following schedule is established for Fairs:
- » March, 18-22 - FIEE202 - Int'l Fair of Electric and Instrumentation in São Paulo.
 - » July, 15-18 - CONAI - Congress and International Automation Fair in São Paulo.
 - » September, 17-20 - FENASUCRO - International Fair of Sugar and Alcohol in Sertãozinho.
 - » November, 19- 22 - ISA Brasil Show in São Paulo.

» **BRAZIL APPLICATION**

smar has reported a significant PROFIBUS installation at the Iraí Water Treatment Station in Curitiba City, Brazil. There, a PROFIBUS system is used to control five sets of submersible pump-motors, the flotation process and the treated water pump motors. More than 200 PA devices are used, including 54 smar PA positioners. There are also Westlock valve actuators operating via AS-i. The full story will appear in our next Issue. Contacts: cesacass@smar.com.br or pascon.dnapl@smar.com.br

» AROUND THE WORLD

News from the Regional PROFIBUS Associations. If you have a story or report to contribute, please send it to the editor at the address given bottom right.

CHINA



During the recent PI Meeting in Beijing, a visit to the PROFIBUS Test Laboratory, the first of its kind in China, took place. With the PROFIBUS Specification being the first to become a Chinese branch-industry standard (JB T 10308.3-2001), the 'route to market' is open for PROFIBUS products. The Chinese PROFIBUS Organisation (CPO) and the Chinese PROFIBUS Competence Center (CPCC) in Beijing are prepared to support PI members to get in contact with Chinese firms. Technical information on PROFIBUS is already translated into Chinese. Various marketing efforts are underway, including magazine articles, exhibitions, conferences and seminar tours. CPO says PROFIBUS has many advantages for Chinese users, including an extensive applications base and excellent support from talented technical personnel at CPO.

NORWAY

The recent General Assembly reported continuous membership growth, with a shift towards end-users. This brings new challenges concerning the mix of serv-

ices provided. All Board members accepted re-election and in addition an education representative was elected. Norway also reports a 'unique Nordic co-operation' called *Feltbuss Node Konsortium*, involving Skotselv, Pondus Instrument, Palmstjerna and BTG. Fieldbus International (FINT) in Oslo has done project management and development and together they have developed a common platform. A successful pilot installation at StoraEnso Gruvon Mill in Grums, Sweden, has now been running more than 2 years.

FRANCE



3000 copies of the latest PROFImag have been published and distributed since May. The cover tells us that PROFIBUS is expanding fast in France.

GERMANY

PNO Germany looks back to two successful PROFInet workshops held in June/July, with more than 50 participants. The interconnection editor, which enables the integration of different devices of any manufacturer into the automation system, was shown by an example, and finally an overview of the necessary expenditure for the implementation was given. Further workshops are planned, for details contact germany@profibus.com

UK

PROFIBUS Made Easy seminars are well underway. In November, UK will host the PROFInet Road Show at the Total Engineering and Manufacturing (TEAM) event. PROFIBUS UK has also been accepted into the Manufacturing Advisory Service initiative, organised by the Department of Trade and Industry.



New members in UK include Roke Manor

Research, which employs 500 engineers. It is based near Southampton and has been responsible for some of the most innovative technological advances in wireless communications and sensors over the past 45 years. It has not traditionally been a supplier to the industrial sector. So why have they joined PROFIBUS UK?

According to Malcolm Streeton, Principal Group Manager, the immediate reason is to meet a specific customer requirement for applying wireless technology to PROFIBUS. However he sees the potential for much wider application, and wants to find other development partners. Technology advances mean the Ultra Wide band Radio (UWB) which Roke Manor has specialized in for many years can now be applied to lower cost systems, and Malcolm believes this capability can benefit industrial control too.

www.roke.co.uk or malcolm.streeton@roke.co.uk

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