

ISSUE 28 OCTOBER 2002



in this issue

Official Newsletter of PROFIBUS International

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PI NEWS

(PAGES 1, 3)

- THE PI PROMISE
- PROFIBUS PAROAD SHOW
- SPS/IPC/DRIVES UPDATE
- ISA UPDATE

APPLICATIONS

(PAGE 2)

- USÁ / AIRPORTS
- USA/PRINTING PRESSES

PRODUCT GALLERY

(PAGES 3)

- **GATEWAYS GALORE ...**
- ... AND ANOTHER
- **EXPANDABLE CONTROL**
- **TERMINATORS**
- **BUS CONNECTOR**
- REMOTE I/O WITH DTM
- **DP-V2 ANALYZER**

GENERAL NEWS

(PAGE 3)

- CALLING USA
- **EVENTS**

AROUND THE WORLD

(PAGE 4)

- PRÓFINET ROAD SHOW STARTS TO ROLL IN **EUROPE**
- **BELGIUM**
- USA
- UK

THE PI PROMISE:

"WE'LL NEVER STAND STILL!"

"PROFIBUS never stands still": that was the key message conveyed to a highly successful press conference held in Germany, September. More than 30 journalists attended to hear PROFIBUS International (PI) explain the latest trends in PROFIBUS automation technology.

Other main messages were that PI helps members ...

- ⇒ expand core business
- ⇒ guarantee the future
- >> convert progress into products and services

For example, PI is the only fieldbus organisation that accommodates new application profiles, and interest in Working Groups (e.g. "Weighing and Dosage", "Identification Systems" and "Devices for Semiconductor Industries") is very high.

With PROFInet technology, PI proves again that a solution is more than just its technical specification. PI offers full support for PROFInet, starting with experts in technical and marketing working groups who operate in close contact with the marketplace. This continues with support from PROFInet ...

continued on Page 3

TRADE FAIRS

SPS/IPC DRIVES Electric Automation Systems and Components Exhibition & Conference



GERMANY

At SPS/IPC/DRIVES, visit the PROFIBUS Booth in Hall 5-145 to get all the latest information about PROFIBUS and PROFInet.

Supported by multivendor live-demos, experts will provide detailed information and answer questions for the following:

- ▶ PROFInet more than iust Ethernet
- ▶ PROFIsafe
- ▶ PROFIdrive" for motion control

Fieldbus organisations, in cooperation with VDMA and ZVEI, are participating in presentations and panel discussions at another 'industrial communication forum' (icf) close to the PROFIBUS Booth.

CATCH UP WITH THE PROFIBUS PA

Organisation will organize a roadshow

along with 16 member companies, offering designers, operators and maintenance personnel the chance to learn more about the integration capability of PROFIBUS within production processes. There will also be opportunities to discuss experiences with end users. PROFIBUS will present itself as a plantwide, fully-integrated automation technology, for



tions. Subjects will include 'Modernizing, Enlargement and Redesign', 'Operation, Availability and Safety' and 'Service, Maintenance and Diagnosis'. The Roadshow will be at Hanover 4th November, Cologne 5th November, Frankfurt 6th November and Salzburg, Austria, 7th November.

USA

The PTO hosted an exhibition of PROFIBUS products for more than 30 vendors on



Booth 1031 at the ISA 2002 in Chicago.

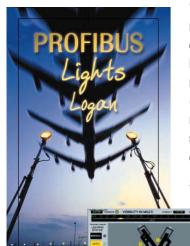
Visitors saw an active display of PROFIBUS DP and PA products, PROFIsafe and PROFInet.

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

www.profibus.com PROFINEWS Issue 28, Page 2

>> APPLICATIONS

USA / AIRPORTS



The USA's first airport to have compu-

terized airfield lighting uses PROFIBUS communications. Boston's Logan, established in 1923, has always been an airport of 'firsts'. Recent upgrades make use of latest technology, innovative software solutions, improved programmable logic controllers (PLCs), and better bus technology. The system was designed by Edwards and Kelcey.

S7-400 PLCs replaced old-

er units. All equipment is housed in a secured area of the airport property, referred to as "the Vault", and this also houses

two redundant PLCs that are at the heart of control. Four levels of redundancy are built in: controllers:



PROFIBUS communications; PROFIBUS I/O; power sources. OLMs allow Ethernet to be used and fiber cabling uses a self-healing 'spanning-tree' architecture for redundancy. Also, if an OLM module fails, the PROFIBUS I/O module has a copper connection to an adjacent OLM that takes over the defective module's responsibilities.

The PROFIBUS wiring and the fiber were laid down inside the existing metal raceway. The bright purple color of the PROFIBUS cable (jokingly nicknamed "Barney cable") makes PROFIBUS cables highly visible and underscores the fact that it barely takes up any space in the channel. Its weight is negligible and the raceway is now free for other expansion projects.

The use of PROFIBUS provides extremely fast response times. The built-in features allow easy configuration, and additional drops can be added easily. PROFIBUS also greatly simplifies the time needed for installing cabling. Edwards and Kelsey: KLambert@EKMail.com



Heidelberg's commercial web offset printing presses use latest motion control technologies and computer interfaces for high quality, high volume color printing.

Engineers at Heidelberg's Web Systems Division in Dover, New Hampshire recently updated the product line to use PROFIBUS-based distributed I/O systems, to reduce the miles of field wiring required for

one of these large machines (they average 137 feet long!). The choice reflects Heidelberg's interest in incorporating a fieldbus that has worldwide acceptance, especially in Europe, a key market for Heidelberg.

Paper runs through a press at up to 3000 feet per minute. Multiple pages can be printed simultaneously across the width, and at the end of the press, the continuous paper is slit into ribbons, then stacked, cut, and folded.

An industrial PC provides overall system control and HMI functions for everything from speed to ink concentration and the slitter.

The new slitting system uses an S7 PLC and RMC100 motion controllers from Delta Computer Systems of Vancouver, WA, which control up to ten axes of revolving blades and anvils. PROFIBUS connects the motion controllers to the Siemens PLC and the industrial PC while the RMC supports direct PROFIBUS interfaces without requiring special modules and communicates directly with the PLC. Engineers chose Delta controllers

because of their accuracy of positioning, PROFIBUS compatibility, and ease of programming and tuning.

The distributed I/O eases connections between the IPC and multiple system elements. PROFIBUS is 'daisy-chained' between the computer and control systems; each system has a unique address on the bus, which the computer references when it writes instructions or interrogates status.

PROFIBUS allows the use of best-of-class components, contributing to lower manufacturing costs, easier assembly and maintenance, and easier upgrades. **Delta Computer Systems:** johanson@deltacompsys.com or +1 360 254 8688

www.profibus.com PROFINEWS Issue 28, Page 3

>> PRODUCT GALLERY

GATEWAYS GALORE ...

The popularity of PROFIBUS is emphasized by this plethora of connectivity and gateway products for Allen-Bradley DF1, ModBus, Mod-



Bus Plus, HART and simple ASCII. Configuration and data mapping are easily accomplished through the editing of text-based configuration files. All modules are DIN-rail mounted units. **Prolinx Communications:** www.prolinxgateways.com

... AND ANOTHER

Profilink 908 converts Modicon Quantum and Series 800 I/O packets to PROFIBUS DP. For local I/O the processor is replaced with a RIO drop card, each configured as a



separate slave. Up to 32 drops are supported and diagnostics are retained. **Process Computer Technology:** +1 713 861 4808 or bwerner@pct-inc.com

EXPANDABLE CONTROL



690PLC+, Kuhnke's extendable control system can be used with PROFIBUS to implement larger de-centralized structures. Integrated analog and digital I/O allow for

processing of signals without additional devices. A counter allows for drive, positioning and fast counting tasks. **Kuhnke:** sales@kuhnke.de or +49 (0) 45 23 4 020

TERMINATORS

T1H-PBC is a slave that can be plugged into the network interface of Terminator I/O systems. It reports identification data, diagnos-



tic information and control parameters. H2-PBC PROFIBUS Base Controller allows a DirectLOGIC 205 I/O sub-system to be linked to a PROFIBUS master. **Automation Direct**: jgerborg@automationdirect.com or +1 770 889 2858

BUS CONNECTOR

EasyConn is a 'high-end' network connector providing test functions for implementation and trouble shooting. LEDs indicate voltage supply and bus-activity (TxD), also checking whether the termination is OFF or ON, a wrong termination resistance or a false surge impedance. An integrated controller works at up to 12 Mbs. **Profichip**: urathfelder@profichip.com

REMOTE I/O WITH DTM

The Pepperl+Fuchs Remote Process Interface connects field signals from hazardous areas to safe areas. Redundant gateways, power supplies and a redundant internal bus provides high availability. RPI includes a DTM which can be configured and parameterized by PACT-ware or other Engineering Tool. **Pepperl** +

Fuchs: akern@de.pepperl-fuchs.com or +49 621 776 1388 or www.pepperl-fuchs.com

DP-V2 ANALYZER

Softing's new bus Analyzer includes analysis functions for isochronous cycles and lateral communication. It uses plain text decoding and does not require detailed protocol knowl-



edge. Softing AG: +49 89 45656-379 or www.softing.com

>> GENERAL NEWS

CALLING USA

MESCO, accredited PROFIBUS Competence Center in Germany, has opened its doors to the US market, offering consulting, hardware and software engineering, tooling and seminars. Their main mission is the development of complete fieldbus products, development of intrinsic safe transmitters to EX-approval and software tools for integration of field-

devices in PLC systems.
MESCO Engineering.
Contact: www.mesco.de
or Steffi.Elschner@mesco.de

EVENTS

Seminars, workshops, training, exhibitions and conferences ... and many other important dates and news from the world of automation are listed on the PROFIBUS website. For more information visit 'News & Events at www.profibus.com

THE PROFIBUS PROMISE:

continued from Page 1

... Competence Centers and extends to quality assurance. The first PROFInet test laboratories will be established by the end of 2002.

A major focus therefore is to make PROFIBUS as easy to use as possible. Pl is putting focus on the development of high-performance, easily used engineering tools. Other examples include validation of PROFIBUS systems

and Web Based Training.

PROFIBUS International is well-prepared to meet the high expectations its special position demands. By building a broad international base and opening up new application areas, PROFIBUS International helps to expand core business for member companies and protects their investments. Expect the next issues of PROFInews to tell you more!

>> AROUND THE WORLD

After the successful series of PROFInet workshops, the European PROFInet Road-

show recently started rolling in France (Paris on Sept. 17, Lyon on Sept. 18, Strasbourg on Sept. 25). The number of participants showed that there is extremely high interest in PROFInet. The first event in Paris attracted around 100 participants (pictured right with the



News from the Regional PROFIBUS Associations. If you have a report please send it to the editor at the address given bottom right of this page.

BELGIUM

In October, the Belgium PROFIBUS Organization organized a seminar for the Process Industry, during which decision makers saw a presentation of the costcutting potential and increased plant availability resulting from PROFIBUS installations. A live demo was used to demonstrate these benefits, using Process Automation Systems and SCADA systems communicating with field devices such as temperature, pressure, level and analytical, flow and remote I/O. Subjects such as Asset Management, cost of ownership, diagnostics and FISCO were discussed in detail. The event was supported by large end users such as ADPO, Egemin, ACB and Eco-vision and Duvel.

USA

In July, the PROFIBUS Trade Organization sponsored a PROFInet and PROFIsafe seminar in Detroit. Included were presentations by Mike Bryant from the PTO, Ron Mitchell from the PROFIBUS Interface Center and Ralph Buesgen, Product Manager from Siemens. Mike hosted the event and gave a rousing PROFInet demonstration. Ron presented PROFIsafe and how it is being adopted worldwide. To complete the day, Ralph presented a PROFInet application story in the automotive industry. More than 70 people attended from Detroit and the surrounding areas.

UK

In UK, courses for Certified Engineers and Certified Installers continue to be run by the PROFIBUS Competence Center at Manchester Metropolitan University. The TEAM trade fair in November will feature the day-long PROFInet Road Show and a special booth will be helping end users understand the benefits of using PROFIBUS. A successful 'Process Made Easy' seminar at Endress and Hauser in Manchester was held in early October, with over 40 delegates hearing from Andy Verwer (MMU), Sarabjit Purewal (HSE), Mike O'Neill (Hawke Fieldbus), Eugenio F da Silva (E+H) and members of the PROFIBUS UK Steering Committee. FDT/ DTM and a Case Study from Johnson Mathey were also presented.

Seminars, workshops, training, exhibitions and conferences... and all other important dates and news from the world of automation are listed on the PROFIBUS website. Just visit 'News & Events' at www.profibus.com

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Published by: PROFIBUS International Haid-und-Neu-Str. 7 D-76131 Karlsruhe, Germany