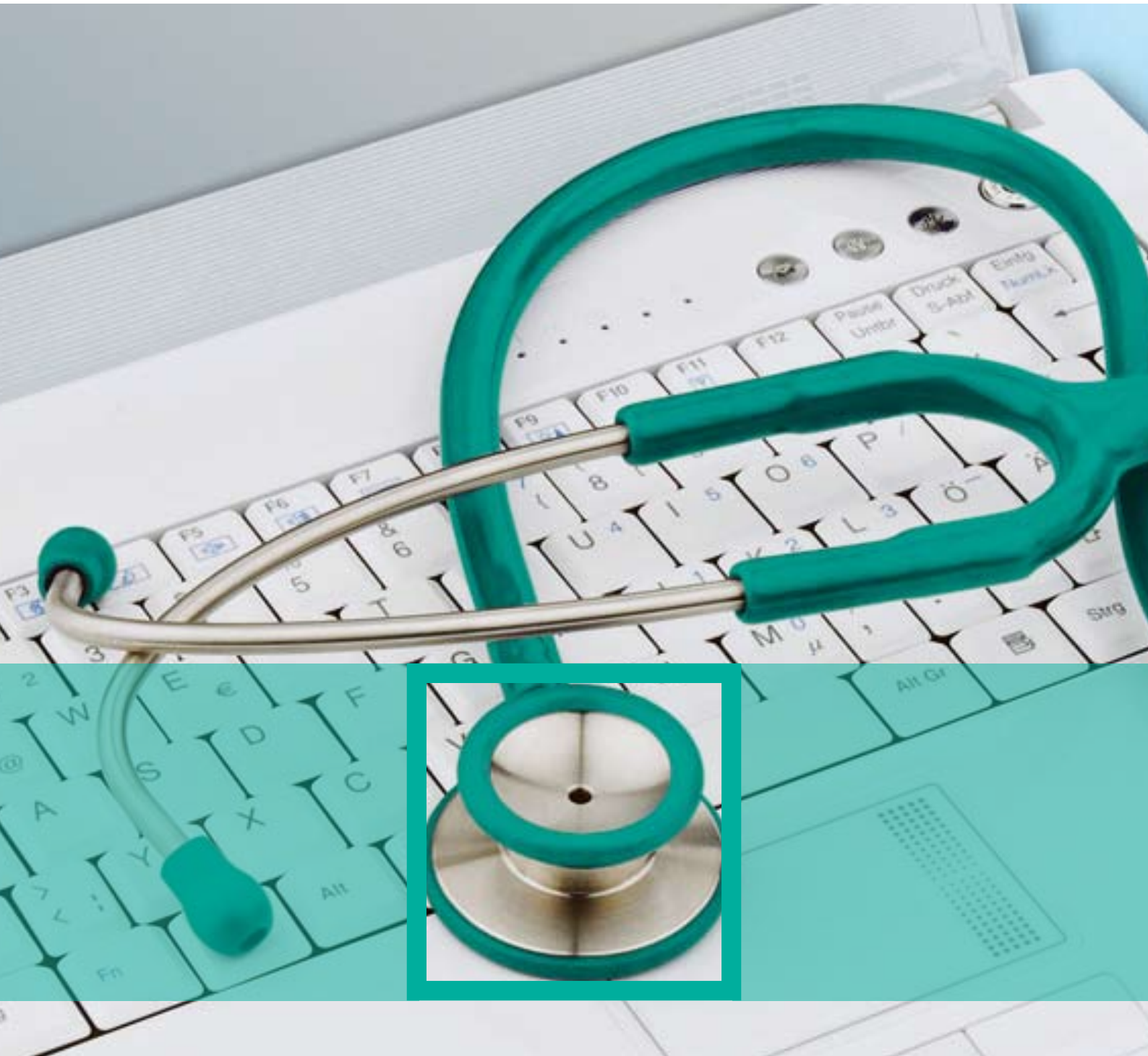


PROTECTING YOUR PROCESS

Still Guessing?
Page 2-3

Recovery from the 2009 Crisis
Page 7



EDITORIAL

Dear Reader,

■ The 2009 economic crisis has left its mark. Some companies did not survive or were bought out and others emerged from the crisis even stronger. Pepperl+Fuchs not only survived, we're stronger than ever, and we're expanding again!

During the crisis, we set about our tasks with courage and foresight. We further improved our processes and procedures, invested in new markets and products, and developed new strategic business areas.

In Management News, on page 7, our managing director, Dr. Gunther Kegel, reports on the significance of innovations in times of crisis management.

This newsletter includes a variety of articles on our many innovations in and for the process industry. I'm sure you will enjoy reading about them!



Thomas Kleinbongartz
 Director Global Marketing
 Process Automation

PRODUCT

Still Guessing?

Get to know your physical layer!



■ Advanced Diagnostics supports fieldbus practitioners throughout commissioning, operation, and troubleshooting of the fieldbus infrastructure—with increased efficiency in all areas.

The advantages are unbeatable when it comes to managing fieldbus assets: convenience of the software user interface, simplicity of set-up and every-day usage, and display of actionable information. Most especially, however, its expert system is a powerful built-in tool that really knows what is going on in the fieldbus infrastructure.

During commissioning the expert system identifies all segments with their connected field devices, and guides you through all necessary steps. Manual work is reduced



to a minimum. For example, if a new field device is connected, the expert system will recognize it automatically and call attention to start the Commissioning Wizard to verify and document its correct operation.

During normal operation, the fieldbus physical layer is monitored online and in real time. The ADM checks the measured data against limits set during commissioning. If these limits are exceeded, warnings are displayed so that you can intervene proactively and prevent any unwanted plant shutdown. This will not only save valuable time but also nerves and costs.

If troubleshooting is required, the expert system guides you to possible causes and remedies via actionable information in plain text. You will know the source of fail-

ure faster, easily understand the alarms, and react properly and instantly. Guessing and trying belong to the past—the fieldbus physical layer becomes a manageable asset!

These are only a few benefits Advanced Diagnostics can offer. Contact us to get more information on how you will have the time to relax by implementing Advanced Diagnostics!

Andreas Hennecke
Product Marketing Manager
Fieldbus Infrastructure

■ WEB INFO

www.pepperl-fuchs.com/adm

■ PRODUCT

Emerson Alliance Program VisuNet Remote Monitors passed all tests

■ VisuNet industrial Remote Monitors have passed extensive testing at Emerson Process Management in Austin, Texas USA for the Emerson Alliance Program.

VisuNet Ex1 Remote Monitors are approved for use in Zone 1 or Zone 21 (ATEX and IEC); the VisuNet GMP Remote Monitors are approved for use in Zone 2 or Zone 22 (ATEX) and are suitable for life science applications under GMP regulations.

Furthermore, the Pepperl+Fuchs VisuNet DM Industrial Flat Panel LCD Monitors (UL listed as a Class I / II Div 2 device) are now part of the Emerson Alliance Program.

Andreas Grimsehl

Product Marketing Manager

Industrial Monitors+HMI Solutions

■ WEB INFO

www.pepperl-fuchs.com/visunet-emerson-alliance

■ PRODUCT

Reading Barcodes Wirelessly New PowerScan for hazardous areas

■ The new PScan-M is a wireless barcode reader for use in hazardous areas. It comes with an ATEX certification for Zone 1, 21 and 22.

PowerScan has patented technologies that enable it to read poorly printed or damaged labels, as well as barcodes positioned extremely close to each other. The robust design assures that PScan-M is working correctly—even after a fall from a height of two meters.

When the code has been read successfully an acoustic and visual signal occurs. Furthermore, the code is displayed so that it can be checked directly.

Andreas Grimsehl

Product Marketing Manager

Industrial Monitors+HMI Solutions

■ WEB INFO

www.pepperl-fuchs.com/powerscan



■ PRODUCT

GMP Quality for Zone 2

VisuNet GMP operator workstations obtain approval

■ Controlling and monitoring processes in regulated industries is now possible in Zones 2 and 22 with operator workstations from the VisuNet GMP product line. As a result, more areas in production facilities can be equipped with the same control terminals.

If operating and observation tasks can be diverted from Zone 1 to Zone 2, then approved operator workstations in Zone 1 can be substituted for approved devices in Zone 2. System operators save considerable expenses and benefit from the same look and feel.

VisuNet Ex2 GMP operator workstations have housings with IP65 degree of protection. They are available as Panel PCs, as network compatible remote monitors, or as simple monitors (KVM extender optional). The 19" displays are available with a touch option upon request.

Andreas Grimsehl

*Product Marketing Manager
Industrial Monitors+HMI Solutions*

■ WEB INFO

www.pepperl-fuchs.com/visunet-gmp

■ PRODUCT

Enhancements to the 6000 Series Purge System

New temperature sensor, hub and firmware

■ The 6000 series purging system is a complete automatic system that will purge and pressurize the protected enclosure and maintain pressure within the housing.

The latest firmware revision incorporates all the features of the previous designs and also includes some new application-specific programming enhancements that make implementing purge systems easier and less expensive!

Summary of the new features:

- Automatic pressure control after purging
- Automatic cabinet temperature control with new intrinsically safe temperature hub and sensor modules
- Enhanced system feedback and alarms

- Intrinsically safe inputs can be inverted for normally closed inputs
- Reboot the EPCU without a system power cycle
- New manifold housing
- Addition of Spanish, French, and German programming menus for the global markets

Kristen Barbour

*Product Marketing Manager
Monitoring and Protection*

■ WEB INFO

www.pepperl-fuchs.com/purge

APPLICATION

Regulated Industries

VisuNet GMP in pharma applications

Regulated industries, especially in the pharmaceutical sector, have high-quality demands on their equipment and processes, which are outlined in the GMP (Good Manufacturing Practice) regulations.

Cleanability, use of antibacterial materials, and mechanical and chemical robustness are only some topics related to their quality requirements.

Our VisuNet GMP monitor solutions are explicitly designed for use in these environments. Especially in batch-oriented production processes, VisuNet GMP monitors directly access the DCS and MES.

The plant operator can interact with the systems, identify oneself to the system (Electronic Signatures according to FDA 21 CFR part 11), control recipe operations, and view process data.

Find more pharmaceutical industry applications on our web site, or contact us for more information.

Stefan Sittel

*Business Development Manager
Industrial Monitors+HMI Solutions*

WEB INFO

www.pepperl-fuchs.com/pharma

PRODUCT

Solution Manufacturing

Hazardous area enclosures

With the acquisition of Walsall Limited we have extended our capability to provide comprehensive customized solutions, enabling us to effectively meet the project requirements of our customers.

Our Walsall-branded, GRP and cast enclosures can be customized as terminal boxes, control units, or complex control panel solutions. All enclosures carry ATEX, IECEx, and GOST-R certification with INMETRO certification becoming available by the end of 2010.

In addition to pre-built solutions, empty, component-approved enclosures are available, allowing you to incorporate Walsall boxes into your own projects.

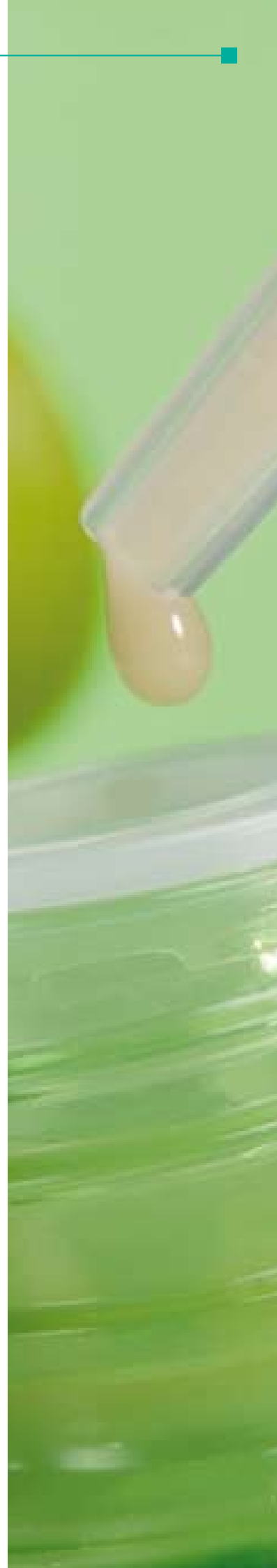
To find out more about Walsall branded Ex e and Ex d hazardous area enclosures and their applications, visit our web site.

Chris Houghton

*Product Marketing Manager
Electrical Components and Solutions*

WEB INFO

www.pepperl-fuchs.com/walsall



■ MANAGEMENT NEWS

Recovery from the 2009 Crisis

DART—A helpful tool to accelerate?

■ It is a general opinion that innovations quickly help to overcome the impacts of a recession and generate prosperous business in the future. Does DART help to accelerate our business and generate substantial orders? Yes and No.

The recession hit process automation—as a “late cycled industry”—nine months after we recognized significant drops in factory automation orders. Currently, we are enjoying orders in the factory automation division that are not only recovering this drop, but growing even higher than the number of orders in 2008. Our suppliers were not prepared for this sudden recovery, and we are suffering from the worst delivery situation we’ve ever experienced. Even suppliers that performed on the highest levels in recent years are now failing to keep their delivery schedules.

Our supply chain and procurement departments are not alone in working hard to cope with this challenge. The R&D department puts enormous resources into the retrofit of obsolete or unavailable products. Above all, the sales organization is working at the customer front to find the best way to provide the limited raw material resources for orders with the highest priority. This is in addition to the countless telephone calls and customer visits to explain and apologize for the trouble. The chaotic supply situation has started hitting the process automation division even though their recovery is not expected for the next three to six months.

Nevertheless, we are convinced that we will serve our customers in the best possible way. We expect relief in the coming quarter with drastically increased production from our suppliers. So, how can a new innovation like DART help in this situation?

During a recession or slow moving markets, customers use the time to learn more about new products, concepts, and technologies. As the economy rebounds, these customers want to start utilizing this new technology, and we will begin to see the first orders soon. As an example, DART was the major reason why NAMUR asked us to take over the sponsorship for the main conference in Germany in 2009 and in China this year.

Even though the number of orders for DART won’t be substantial this year, it is still a technology that customers want to learn about and discuss. And we are ready to tell them all about it.

These discussions help to communicate the innovation and strength of our company and create a tighter bond with our customers. They also enable us to talk about technology instead of delivery problems.

Dr.-Ing. Gunther Kegel
Chief Executive Officer

PRODUCT

Time to Relax!

Upgrade of Diagnostic Manager

■ The Advanced Diagnostic Module monitors the fieldbus physical layer online and in real time. The Diagnostic Manager software upgrade will get users excited with features that include an embedded expert system for precise diagnostics, automatic tag reading and an improved oscilloscope—just to name a few. Fieldbus becomes easier and more reliable. Time to relax!

Download the upgrade today and get a quote to unlock the latest and most powerful features for commissioning, monitoring, and troubleshooting the fieldbus physical layer.

Andreas Hennecke
Product Marketing Manager
Fieldbus Infrastructure

WEB INFO

www.pepperl-fuchs.com/adm-upgrade



PRODUCT

Saving Space and Money

New backplane eliminates redundancy box

■ The new Compact FB Remote I/O simplifies your engineering tasks: Extra space for the redundancy box is no longer required. A new backplane has been developed that reduces space requirements by up to 30%—you also save time when installing the new enclosures in Zone 1 as fewer cables between housings need to be wired.

Engineering has become easier as the number of different housings has been reduced.

Of course, Compact FB Remote I/O is still based on proven redundancy methods, and can be integrated easily into existing plant environments. It is fully compatible with established versions.

Check for yourself and learn how Compact FB Remote I/O will save space in your plant and money in your budget.

By the way, have you noticed that our FB Remote I/O modules now feature our green corporate colors? This makes handling easier due to an improved optical contrast with the backplane. Full compatibility with existing installations is ensured.

Rainer Hillebrand
Manager Product Group
Remote I/O Systems

APPLICATION

Safe Voyage

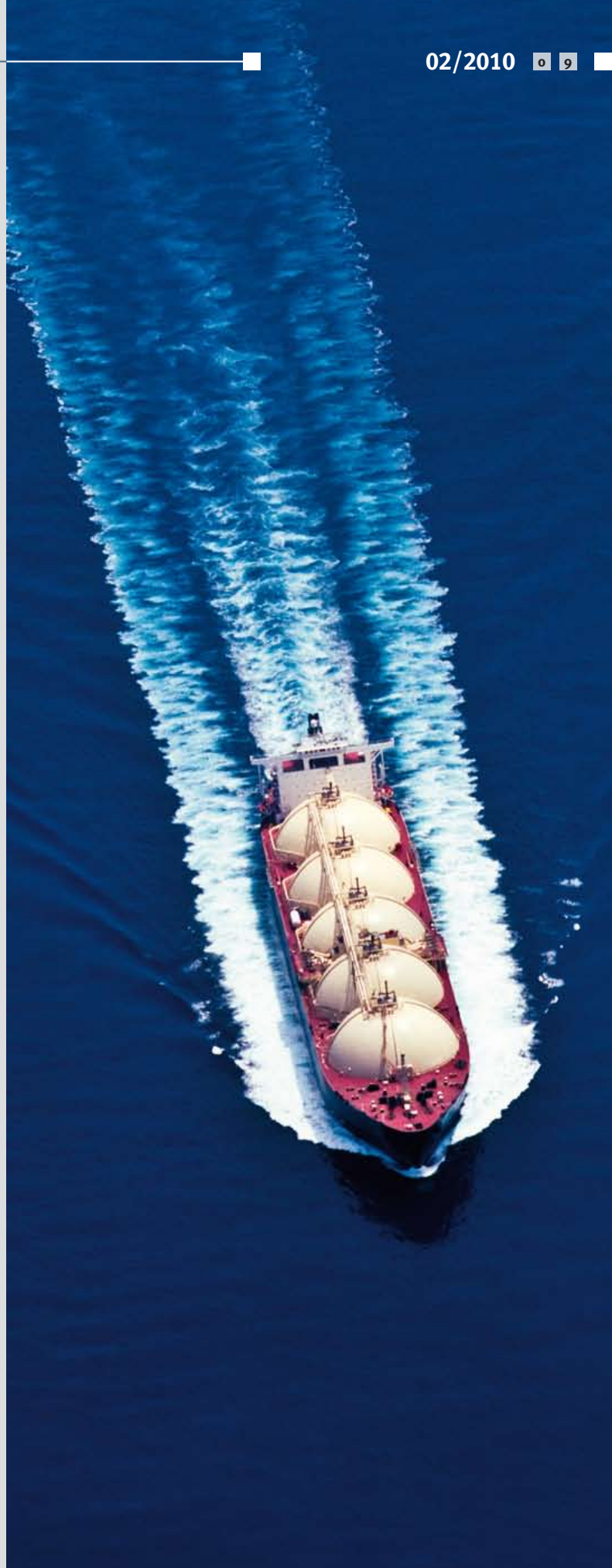
LNG Tanker fitted with Remote I/O

Liquid natural gas (LNG) tankers use insulated gas containers in which the gas is cooled to -163 °C. Explosion protection is a requirement for all electrical equipment due to the flammable properties of the gas. Intrinsically safe Remote I/O from Pepperl+Fuchs is used to interface the sensors and actuators in hazardous areas with the control system in the safe area.

The Remote I/O system is proven in thousands of onshore applications and now it meets marine requirements. Environmental tests, vibration tests, and additional EMC tests ensure that Remote I/O will operate on marine vessels. Bureau Veritas, DNV, and ABS are the marine approval authorities for this type of equipment.

The Remote I/O is mounted in standard Ex-approved enclosures allowing access to the modules as needed. Remote I/O helps to reduce installation costs by saving space onboard the LNG tanker. Remote I/O requires fewer hardware components to interface with the control system and communicates via a standard twisted pair bus. It is also capable of driving high-power solenoids. This is particularly important for marine applications where solenoids need to withstand continuous vibration.

Remote I/O also permits HART communication with transmitters and valves. This gives the operator access to additional information which is normally available only via handheld communicators.

Rainer Hillebrand*Manager Product Group**Remote I/O Systems*

IMPRINT

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PRODUCT

Safety and Innovation

K-System optimally protects your investments

■ K-System has evolved over the last 20 years, making Pepperl+Fuchs the market leader in the area of interface technology. Many of the 20-year-old devices are still working properly. But, if one does fail, it can easily be substituted with new modules—compatibility is guaranteed.

Plant operators can rely on an integrated installation procedure, functionality and terminal connections so that availability is also ensured.

We regularly adapt our modules to current technologies and standards that provide up to 30% space

savings in the control room cabinet and 30% less current consumption.

Get more information on our K-Systems reliability, innovation, and versatile application areas.

Stefan Pflüger
Product Marketing Manager
Interface Technology

WEB INFO

www.pepperl-fuchs.com/k-system

NEWS

There is nothing smaller or cooler

■ The FieldConnex Compact Power Hub is the best power supply for FOUNDATION fieldbus H1 reducing heat and saving space.

Get detailed product data—search for MBHC* and HCD2* at www.pepperl-fuchs.com.

Andreas Hennecke
Product Marketing Manager
Fieldbus Infrastructure

SUDOKU

Fill this 9×9 grid with digits so that each column, each row, and each of the nine 3×3 sub-grids contain all of the digits from 1 to 9.

3				4				5
9				3		4	6	
			8	7		9		
	9			1	8			
				6		2		8
					2	7		9
		5	4	8		1		
1					7	3		
2			1	9		6		

NEWS

New DART Whitepaper

Answering your questions on DART

■ **Dynamic Arc Recognition** and **Termination** (DART) is a dynamically acting, intrinsically safe electric circuit and represents a completely new approach to eliminating the strict power limitations of today's applications in explosive hazardous areas.

Now, it's time to talk about the technical refinements. A whitepaper has been created that clarifies most of the technical questions on DART's technology and functionality, such as:

- Which parts of a circuit are intrinsically safe when DART is used?
- How does the DART power supply work?
- What are the limitations of this technology?

There is special focus on the decoupling module, which ensures the well-defined electrical behavior from both a functional and a safety perspective. The

module is integrated into the housing of the load and connected in a series. It permits operation of practically any load with DART. The whitepaper provides an overview of the requirements the decoupling module must fulfill and includes examples showing the dependencies on different kinds of loads.

Learn more about the technical details of DART, intrinsic safety, and how DART fits into the known types of protection with the new DART whitepaper.

Michael Trautmann

*Product Manager
Interface Technology*

WEB INFO

www.pepperl-fuchs.com/dart-whitepaper

NEWS

Latest in Marking Ex Devices

■ With the acquisition of Walsall, we have considerably expanded our product range of apparatus for hazardous areas. If you observe the identification plates of the new junction box more closely, you will see that the markings have changed.

For example, increased safety housings were previously marked Ⓜ II 2G Ex e II T4. Equipment category 2G allows the user to see at a glance that this device is for use in Zone 1. The device category designation is part of the EU Directive 94/9 and is legally binding for Europe.

The second part, Ex e II T4, is based on underlying standards and shows that the manufacturer built the housing according to the "increased safety" (Ex e) type of protection, a type of protection that is conventionally also used in Zone 1.

The user can actually find the note "suitable for Zone 1" in two places.

This idea—assigning an apparatus of a particular category to a zone specified by the user—has now been adopted by international standardization bodies. Now the Equipment Protection Level (EPL) can be found in the marking: Ⓜ II 2G Ex IIC T4 Gb. Find out what is behind the Equipment Protection Level on our website.

Michael Wenglorz

*Trainer for Explosion Protection and Functional Safety
Training and Committee Work*

WEB INFO

www.pepperl-fuchs.com/EPL

EVENT

Processteknik

Svenska Mässan
Göteborg

26-28.10.2010

Skandinaviens ledande
mässa inom process- och
fabriksautomation

Vid frågor eller för mer information
vänligen kontakta oss enligt nedan.

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PROTECTING YOUR PROCESS



We've got you covered—no matter what kind of protection you need.

Paragliders trust the protection of their harness. You can trust the explosion safety of your plant with protection concepts and solutions developed over 60 years from Pepperl+Fuchs.

Our intrinsic safety barriers protect thousands of chemical, pharmaceutical, oil & gas and other production plants against explosion hazards—but we have much more to offer: fieldbus infrastructure solutions, remote

I/O systems, HART interface solutions, level measurement devices, purge and pressurization systems, industrial monitors and HMI solutions, power supplies, separator alarm systems for oil and petrol separators, signaling equipment, and lighting, as well as emergency shutdown equipment and accessories.

With locations and partners all over the world we are there, wherever and whenever you need us.