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Ireland's journal of instrumentation, control, and automation



ISA Seminar in Dublin inside **Technology Modernisation of Plant Automation Systems**

he ISA Ireland Section held their annual seminar in Dublin last March. Upwards of eighty delegates attended and there was a small table top ancillary show of about fifteen stands. The talks were given by and large by users giving their own individual experience in plant automation and in the changeover of older plants to newer more modern and more efficient design.

Given regulatory and cost pressures, driving technology modernisation and innovation programs with a change in plant systems can be a challenge. But it's more important than ever. With the advent of evolving operating systems for computer based control systems and recent "end of support" for "old" operating systems such as XP, this places new challenges to system vendors and integrators in adopting new ways of upgrading existing legacy plant systems and ensuring that plant infrastructure is protected in the backdrop to new OS platforms, utilising technologies such as virtualisation reduces physical hardware costs but requires investment in this environment. Ensuring that plant systems are able to smoothly communicate from the plant floor layer to the corporate enterprise layer is another factor to consider in any approach with technology modernisation projects without interrupting daily plant operations and controlling technology risks from models going haywire. This seminar brought together key industry guest successfully have speakers who implemented such programs for "Technology Modernisation" along with industry solutions from vendors based on past case studies.

ISA in Ireland are fortunate in the number of plants in leading industries that are based in Ireland. In this day long event the experiences and lessons learned of the endusers companies like Novartis, Johnson & Johnson, Amgen, & Helsinn were shared with those in attendance.

to page 5



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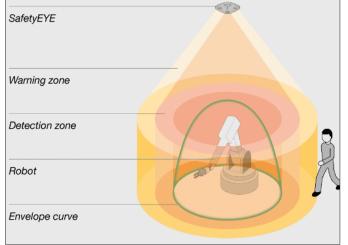
A 3-D perspective in presence detection!

resence detection is a critical element in the basis of safety for many pharmaceutical and bio pharmaceutical processes. Detecting presence of workers prior to start-up and during operation of machinery and processes is an effective means of injury prevention. Likewise product can be protected from human contamination using collaborative robots allied with relevant 3-D presence detection. The pharmaceutical sector has always had to deploy sophisticated processes and technology in its manufactur-ing environment while main-taining the highest safety standards.

Presence detection is an approach which responds positively to the need for worker while minimis-ing safety production disruption. Process components such as centrifuges and barrel mixers pose a significant risk to workers because of high speed rotational action or agitation. Likewise transportation of storage units such as inter-mediate bulk containers and the use of wrapping automated and palletising machinery create the need for effective safeguarding. 3D sensing systems provide many advan-tages through the introduction of barrier-free safeguarding.

SafetyEYE, a 3-D virtual detection system, provides a comprehensive protection zone around such machinery. Developed jointly by the **Pilz** Research Software and **Development** team in Cork and Product Development the division in Ostfildern (D), the company considers SafetyEYE as an example of new technologies creating а paradigm shift in the planning of safety for current and future manufacturing systems.

Named 'Safety Company of the Year' for 2014 by the Institution of Occupational Safety and



Health's (IOSH) Desmond-South Munster Branch, the award recognised the company's commitment to continuous innovation, singling out the development of SafetyEYE as central to this commitment.

Bob Seward, chair of the IOSH Desmond-South Munster Branch, said: "The development of this innovative SafetyEYE technology will make a significant difference in terms of protecting people at work while they operate around machinery danger zones. Our members were very impressed with SafetyEYE and what it can achieve in terms of accident prevention and safeguarding workers."

The world's first 3D zone monitoring system SafetyEYE comprises a three-camera sensing device, an analysis unit and programmable control capability.

The sensing unit creates the image data of the zone to be protected and the stereoscopic cameras allow for precise distance and depth perception. Adjusting the height of the camera device allows for varying zone dimensions and areas of coverage. The image data is processed by the analysis unit to detect any intrusion of the defined 3-D protection zone and is relayed to the programmable safety and

control system (PSS) for activation of the appropriate safety response.

The avoidance of an obstaclecourse of physical guards has obvious advantages for increased freedom of interaction and ergonomics between machinery and humans without compromising safety for both. Because of the highly configurable software a wide range of detection zones can be designed either using predefined geometric forms or bespoke shapes. These zones can then be assigned various safety-related actuations with reference to the risk from an audio-visual warning to shutdown.

SafetyEYE can be used to prevent start-up of machinery when persons are in a danger zone or provide warnings and if necessary activate a shutdown if an operator enters a danger zone while such plant is running. The system can be configured to signal a warning as the worker enters the perimeter of the defined safety zone and as he continues further into the zone initiate further safety actions. The machine can remain in this suspended state while the worker completes his task. Once the worker has cleared the area the machine's activities can resume in accordance with the worker's egress from the safety zone. This incremental reactive

capability allows for minimum downtime and so optimal productivity is maintained. For workers who only encroach on the outer points of the safety zone the triggered warning will uphold the safety integrity of the work space without limit-ing operation. Likewise, the system can be configured to allow for pre-defined spaces within the protection zone to be breached without shut down. This is especially useful for supervisory personnel who need to access control components which lie within the safety zone. Again they may complete their task safely without the need to the manufacturing disrupt process.

To achieve the same level of safety in such a scenario as this, a whole range of other safety measures may have to be deployed, such as guard-doors, with the physical and visual restrictions these solutions will impose. Safety for workers venturing beyond these guards would then require optical sensors which operate twodimensionally along a plane and may require a multiplicity of sensors to provide comprehensive monitoring. This mix of solutions can present significant cost implications and their static single-plane positioning will raise costly design challenges. As SafetyEYE is positioned above the manufacturing area it does not present any physical or visual obstruction and it is also far less likely to be interfered with than other ground-level safety measures which are always more vulnerable to intentional or accidental interference. The 3-D zonal capability means that one sensor unit can provide far more safety coverage than the planar sensors. Such imaging-based devices also have a recording functionality so that safety zone breaches can be recorded or production activity monitored to To page 5



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SurName:				Strategy and marketing
JOB TITLE: Company: Address:				 PICC (PI Competency Centres) Meeting – Representatives from 51 Centres globally Topic: Technical support for industry for DECENSITY - LOCENSET - LOCENSET
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3 D Perspective from page 2

feed into productivity metrics. These attributes were acknowledged by Bob Seward of the IOSH when presenting Pilz with the award. "With the introduction of this certified technology, safety can no longer be seen as a barrier to work, slowing work down or stopping work. It can be truly integrated in the work system."

Pilz Ireland managing director John McAuliffe said: "Pilz were honoured to receive this award. The area of safety in which we work is constantly changing and Pilz need to be innovative in order to provide our customers with solutions that achieve safety in lean manufacturing environments." Providing services from risk assessment, safety design and safety training to customers all over the world the company views continuous development of processes and products, such as SafetyEYE, as vital in meeting the constantly evolv-ing demands of the modern

manufacturing environment. SafetyEYE is especially effective in ensuring the safe deployment of collaborative robots which are ideal for

ISA Seminar from page 1 Subjects included "Transitioning DCS from custom and legacy to current and mainstream" from Séamus McGrath of Novartus while Darren Murphy of Amgen discussed "Migrating a mature PCS system to a virtualised platform in a commercialised BioPharma Drug Product plant." Jim Molonev of Johnson & Johnson addressed "The IT challenges on the interoperability of L2, L3 and L4 in today's Enterprise Class Networks.'

There were useful contributions from vendors too with Aidan Finnigan and Paul O'Connell broaching "IT trends and best practice in Industrial IT infrastructures" while Damien White of DataLogics talked about the important issue of handling materials and ingredients in a decontaminated environment but which require some level of interaction with operators who need to ap-proach

cyber-security in the plant. **Phil George** from Rockwell spoke about the application of "The Internet of Things (IoT) in the connected enterprise.

All in all this was a very successful foray into the capital by ISA sometimes, perhaps unfairly, seen as more based in the southern counties. Great credit is due to the ISA's Programme Chair. John Murphy and to his subcommittee. They have proved, if this was necessary, that the face to face interaction of automation professionals is something that not only is useful but necessary and an important contribution from ISA to the automation sector in all industries in Ireland. Pictures from this event may be found inside the back page. www.isa.ie

to carry out superv-isory, control or intervention.

Such are the potential production efficiencies brought about by collaborative robotics in the bulk pharmaceutical manufacturing sector that H & S managers, engineers and suppliers will need to align their safety strategy in line with the new industrial environment.

As with all new technologies care and due process must be exercised in the integration with other plant and machinery. Structured risk assessment considering the specific hazards leading to intelligent safety concepts are the key to successful adoption of such new technologies. Pilz is pio-neering safe automation with the continuous development of its services and products, such as SafetyEYE, ensuring that its customers can anticipate the safety challenges presented by industry developments such as collaborative robots.

www.pilz.ie

We're revealing some powerful new brands!



Classic Technology has added GE Bently Nevada and GE Commtest product ranges, giving customers access to some of the World's leading Asset Condition Monitoring and Vibration Analysing products.

The addition of these new brands will further enhance and extend Classic Technology's position as Ireland's foremost independent test instrument supplier, representing many World leaders in their field, and the country's leader for instrumentation calibration and maintenance



Classic Technology 045-896660 email: info@classictechnology.ie www.classictechnology.ie UKAS accredited laboratory Ref 0822.

Water monitoring technology

OTT Hydrometry demonstrated the latest water quality and level monitoring technologies at the International Association of Hydrogeologists Irish Group meeting in Tullamore recently. Entitled: "Integrated Hydro-geology: Contemporary Princi-ples, Policy and Practice," this event addressed many of the strategic relating the issues to management of water resources, in addition to the technical aspects of monitoring. The OTT also featured water level loggers such as Ecolog and Orpheus Mini, water level contact gauges/dippers and Adcon/OTT telemetry solutions.

www.ott-hydrometry.co.uk

50 years in Ireland



Atlas Copco Compressors in Ireland is to hold a full programme of staff and customer events to celebrate its 50th year of operation throughout Ireland. The anniversary year will be celebrated with a range of product campaigns, customer promotions and staff events, conducted by a 30-strong team of technical sales, service and support staff who are closely engaged with meeting customers' application needs. Commenting on the company's commitment and economic contribution to Irish industry, Sean Fairest, Country Manager for Compressor Technique, said: "The alliance of productivity and efficiency in manufacturing has been crucial to Ireland's continuing economic growth. Under the company's guiding principle ofpromoting sustainable productivity, Atlas Copco has sought to support Ireland's industrial resurgence with an extensive portfolio of compressor equipment for a broad spectrum of applications, while providing trusted advice and ongoing services to ensure that efficiency and performance are fully optimised in the long term."

"A reliable supply of high quality oil-free compressed air is essential to our production processes" says Emmett Loftus, Maintenance Superintendent at Hollister ULC, a global healthcare products manufacturer located in Ballina, Co Mayo and a long-standing customer of Atlas Copco. "Over the many years of our association, we have been able to rely on the quality and continuity of equipment performance and every aspect of Atlas Copco's sales and aftermarket services with complete confidence."

Atlas Copco's mainstream activity in the west of the country has been assisted by the appointment of C&L Industrial Ltd, based in Galway as distributor for Industrial Air compressors, Quality Air products and spare parts.

www.atlascopco.com

Address change! Wolf Process Automation

Limited has changed address to:

Unit 2A Thompson Enterprise Centre, Clane Business Park, Clane, Co. Kildare. Tel: +353 45 831575

www.wpa.ie

New name!

Thirty-four-year-old networking expert B&B Electronics is now known as B+B SmartWorx. While continuing the tradition of developing mission-critical network connectivity technology for remote or demanding environments, B+B SmartWorx is ramping up the intelligence in that connectivity piece, embedding intelligence throughout the network connectivity stack, from edge device to network backbone.



B+B's latest technologies have led the company to this new position in the Internet of Things (IoT) industry and the decision to change its name. Those technologies - the Wzzard Intelligent Sensing Platform for creating wireless sensor networks (WSNs) where customer applications and logic reside at the network edge, and its SWARM intelligence-based cellular edge gateway devices combine to form the B+B SmartWorx IoT Edge Processing Architecture.

Engineered for environments where existing equipment and networks are too valuable to ignore or replace, B+B's edge processing architecture adds new layers of functionality, efficiency, productivity and scalability to existing M2M data networks, allowing integrators and VARS to evolve their customers' existing networks into more autonmous and decisive IoT systems.

"IoT technologies have inserted more intelligence, and complexity, into the M2M conversation," said Jerrv O'Gorman, CEO of B+B SmartWorx. "While companies desire the improved data analytics the IoT brings, many are stopping short of adoption due to the complexity of integrating existing assets into the IoT vision. For several years B+B has been engineering solutions to bring existing equipment into the IoTconversation, and hence transitioning from connec-tivity

technology to technology for connected intelligence, so the old B&B Electronics image didn't fit us anymore."

O'Gorman points to the 2012 acquisition of Czech Republicbased Conel and its industrial cellular gateways as the spark for the company's intensive development to enable IoT solutions. "The Conel us acquisition gave an *immediate pedigree* within Europe, and our new technologies build upon this trusted base. With the integration process complete it seems right to combine our identity into a *single brand, bringing together* the best of what has been achieved in Europe and the US in the past decades, and signaling our strategic direction in future."

The new focus on the intelligence in the connectivity piece has also led B+B to invest in software engineering expertise at all of its global locations, including a new team in Galway. Historically, B+B averaged one or two software engineers for every hardware engineer; today it's six or eight to one.

"The M2M and IoT world is changing rapidly, creating enormous opportunity but with that a risk of being left behind," explained Glen Allmendinger, founder and president of Harbor Research. "Many companies are struggling with this. Some are attempting a complete change in business model; others have yet to embrace any clear strategy. B&B Electronics, now emerging as B+BSmartWorx, has onlv not embraced the new opportunity but they've also executed on it in a remarkably short period of time. Impressively, they've done *it without putting their business* model at risk or alienating other players in the ecosystem by partners turning into competitors."

www.bb-elec.com

HAL at Hannover



Hal Software launched their Spike Prototype software at Hannover Messe. Spike Prototype allows users to prototype control and MES systems to any level of fidelity, from simple valve sequencing all the way to complete batches. Standards based (ISA-S88 and ISA-S95), easy to use and target system independent, Spike Prototype is designed for use across an organisation.

As part of the launch Hal prototyping, rather than if." Software's Chief Technical www.hal-software.com Automation news daily on read-out.net/signpost/nuacht.html

Officer **Cormac Garvey** (left) presented at the event's prestigious Industrial Automation Forum. The title of the presentation was "Prototyping a batch control system using ISA-S88 and ISA-S95 design patterns." and Read-out hopes to publish this presentation in the future. Cormac says prototyping will help transform automation and will be the industry standard in 5 years. "A typical project saving of 30% is far too high to ignore. Additional use cases in knowledge manage-ment, process improvement, reverse engineering, "what-if" scenarios testing and corporate standard design make the concept a compel-ling one. Automation profes-sionals, MES engineers and process engineers need to ask themselves when they are going start using to prototyping, rather than if." www.hal-software.com



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Firmware for Wireless

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Emerson Process Management has used customer input to design the new firmware version 4.5 for its Smart Wireless Gateways. This new firmware will enable users to see and understand process information quickly, helping to make sound decisions and take needed action.

The new version streamlines the wireless network interface, security setup, and field device configuration. It has a consistent look and feel and simplifies information presen-tation. Visual feedback and information filtering are built into the software to support fast navigation. NAMUR symbols and organised table views provide-at-a-glance actionable information.

"Across Emerson we have continued to invest in Human Centred Design. Our new 4.5 firmware is a great example of the power of this investment," said Tom Moser, president of Emerson's Rosemount business. "The clean design and intuitive interface actionable puts information at our customers' fingertips."

Version 4.5 will also give users quick access to field instrument diagnostic data for continuous monitoring of device health and the wireless network.

www.EmersonProcess.com

Asset condition

GE Bently Nevada and GE Recognising the need Commtest asset condition monitoring and vibration analysing products have been added to the World leading test instrumentation ranges available from Classic Technology, a leading independent test instrument distributor.

The SCOUT and vbSeries ranges of portable data collection and vibration analysis diagnostic instruments are the choice for first leading companies around the world, providing all-in-one tools suitable for every level of vibration analysis - from novice to expert. These instruments offer the power and convenience of dual-channel measurement and dual-plane balancing, to help improve the reliability and performance of production assets like turbines, compressors, motors, generators, and everything in between.



Classic Technology represents some of the world leader's in their field and operates Ireland's UKAS accredit-ed only calibration laboratory for Mass, Pressure, Temperature and Electrical Calibration. Customers know they can rely on an unbiased opinion of the best test equipment available; covering parameters such as Pressure, Temperature, Mass, Flow. Level, pH, Conductivity and Condition Monitoring. Classic Technology is also Ireland's only GE Druck Approved Service Centre.

www.classictechnology.ie

Calibration sources

Eurolec Instrumentation has extended their range of temperature calibration sources with the introduction of the CS174-IN & CS175-IN.

to accommodate custom built or non-standard sized probes, these two new instruments extend user options and provide increased flexibility by providing two removable inserts for probes. One insert is predrilled with 7 holes of various dimensions and the other insert is a solid nondrilled "blank" block to be configured by the user as required.



Both inserts can be quickly and easily removed with the assistance of a simple tool which is provided with the instrument. Both the CS174-IN & CS175-IN also feature a "black body" for infrared thermometers and feature a range of 40C below ambient to +85C. The CS175-IN features increased accuracy and 0.01C resolution. Both units are complete supplied with calibration certificate.

The CS174/175-IN provide a simple to use, cost effective system for the on site or laboratory calibration of both contact and infrared thermometers, to adhere to quality standards such as ISO9000 and HACCP.

www.eurolec-instruments.com

Frequency inverters



One of the highlights of the Electric Mitsubishi next generation range is the new FR-A800 inverter. The ultramodern drive has been specially designed for use in classic plant and machinery and with its maximum output and performance, increased efficiency and productivity are guaranteed. At the same time, the latest inhouse technology concepts will enable the optimisation of plant efficiency and energy balance. FR-A800 inverters are particularly user-friendly and offer numerous network connections. The FR-A800 series is the result of the further FR-A700 series guarantees that

development of the successful FR-A700 series. It complies with international regulations and standards and is equipped with the very latest safety functions.

The FR-A800 series of inverters is the company's very latest drive technology with an output range extending from 750 watts up to a maximum of 1 megawatt. They provide for the operation of both standard asynchronous motors and IPM/SPM motor technology. USB host and USB device functions guarantee userfriendly programming and parameterisation as well as data logging functionality. It is also fully integrated in Mitsubishi Electric's iQ Works programming environment. The built-in operation panel and multitext display allows the easy and intuitive operation of the components.

Real sensorless vector control enables maximum speed and torque quality up to a maxi-mum frequency of 400 Hz to be achieved. An overload capability of 250 per cent during the start-up phase will ensure reliable start-up, especially difficult under operating conditions. Minimum terminal scan times of less than three milliseconds will guarantee the fastest possible response. At the same time speed rise times of less than 80 milliseconds will help to ensure maximum performance and improved productivity.

Four overload scenarios offer optimised plant planning while three additional slots expand the range of possible applica-tions. Functional safety up to PLe/SIL3 guarantees operation in situations ranging from simple emergency stops to complex press actuation. The new series of inverters offers a total of eleven network options enabling them to be used worldwide. Full backward compatibility with the

Products from page 8

components can be replaced easily and safely.

And now, Mitsubishi Electric has added dust and splash-proof versions with an IP55 protection rating to its FR-A800 series of modern frequency inverters. Specially designed for harsh environments and tailored to the requirements of pumps and fans, the drives are highly robust and ideally suited for use in industrial and commercial building automation systems as well as in heating, ventilation and air-conditioning systems.

ie3a.mitsubishielectric.com

U.S. Flowmeters



Sonic-Pro® Hybrid Ultrasonic flowmeters measure flow rate using either Doppler or Transit Time methods. Non-invasive clamp-on transducers work with both clean and dirty fluids, with a high capacity flow velocity range of up to 30 feet per second (9 meters per second).

Sonic-Pro® can be configured and controlled remotely via RS-232, RS-485, USB, or Ethernet. View real time flow and download data log files remotely on a Windows® PC.

Additional features include: Easy reading backlit LCD; data logged to standard SD card format supplied with unit; isolated 4-20 mA output - fully configurable; 0 – 1000Hz Pulse Output - fully configurable. Housing is NEMA 4X (IP 66) wash down.

Sonic-Pro® may be ordered selectable. with the optional T-Track voltage, cu mounting system. power level

www.blue-white.com

Digital Meters



The latest member of the ProVu® family of digital panel meters is the PD6400 High Voltage and Current Meter. Precision Digital products are marketed in Ireland through **P.J. Bonner & Co.**

An 1/8 DIN size unit, the PD6400 provides reliable measurement of high voltage, current, and apparent power. Independent, field-selectable current and voltage inputs accept up to 300 V and 5 A, AC or DC. The user-configurable, dual-line display features easyto-read LED digits and warning lights with adjustable brightness. Modbus[®] capability (Slave) allows seamless integration into existing networks. The PD6400 is NEMA4X/IP65 rated for use in a panel or in the field under harsh environmental conditions; it also carries CE and UL listings.

The PD6400 High Voltage and Current Meter can be easily installed into virtually any application requiring high voltage measurement up to 300 V, high current measurement up to 5 A, or measurement of apparent power. The meter can also accept current transformer inputs for even higher current measurements. AC or DC voltage or current can be measured, fieldand is

selectable. The displayed voltage, current, or apparent power level can be clearly labelled with a custom tag and unit. The voltage and current can also be scaled to represent different engineering units.

Programming the PD6400 is easy with the company's free MeterView[®] Pro software, which streamlines meter setup and eliminates most button pushing.

Options for the PD6400 meter include up to four (4) relays, a 4-20 mA analog output, and a 24 VDC power supply. Expansion modules add an additional four (4) relays, two (2) 4-20 mA outputs, and eight (8) digital I/O.

www.pjbonner.com

Environmental Monitoring



parameters including temperature, RH, CO2, voltage, current and count, enabling conditions to be recorded, analysed and validated. The range includes units that are ideal for temperature monitoring in manufacturing, process and engineering applications.

These loggers, marketed in Ireland by **Manotherm**, have a rugged, waterproof and dustproof design, and if required, accompanying probes are available for measuring extremes of temperature, product core temperatures, or for comparison of both ambient and process temperatures. Probes are also suitable for monitoring awkward to reach areas such as pipework.

The range includes a thermocouple logger which supports type K, J, T and N thermocouples, providing fast response, versatile monitoring from -270°C to 1370°C.

As well as stand-alone loggers, which record data that is downloaded to a PC for analysis, a Radio Data Logging System is available which is ideal in premises requiring multiple monitoring points. Environmental data is gathered automatically and sent via a receiver for direct viewing on a PC, across a LAN, or remotely across the internet.

Radio loggers record temperature, RH, and also low voltage, current and count inputs, making them suitable for use with third party sensors to record properties such as pressure, flow rates and footfall. www.manotherm.ie

IS Humidity & Temperature



ations. The intrinsically safe EE300Ex marketed in humidity & temperature herm, have a transmitter from Instrument proof and Technology conforms to the european ATEX Directive and now also to the international of r measuring IECEx and the FM classificatemperature, tion. This makes the device of



From page 9

suitable for worldwide usage in explosion hazard areas. This unit was developed for use in explosion hazard environments and can be mounted directly in both gas and dust hazard areas of zone 0 / Div1. Precise humidity and temperature measurements from 0-100 %rel. hum. and -40-180 °C (-40...356 °F) are also possible in applications under pressure up to 300 bar (4351 psi). Just as with humid-ity measurement in air, the EE300Ex can also be used for moisture measurement in oils. Various models offer a high degree of flexibility. As a compact variant - with or without display – the transmitter can be mounted directly in the hazard area. With a remote probe. temperature classifications up to T6 can also be achieved. Depending on requirements, an EE300Ex model for combined humidity & temperature measurement or for temperature measurement only is available. The two-part stainless steel housing (separate connection area and measurement unit) simplifies installation of the transmitter considerably. It also permits the rapid replacement of the measurement unit – such as for calibration - without timeconsuming re-cabling.

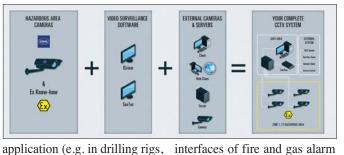
The measured values are issued on two analogue outputs with 4-20mA. The power can be supplied via any intrinsically safe power supply device. In addition to the measured values for humidity and temperature, dew point, frost point, absolute humidity, mixing ratio and other calculated values can also be issued.

The configuration software permits customised configuration of the transmitter outside the hazardous area and permits, flexible, simple and rapid adaptation of the analogue outputs for the relevant application.

www.itl.ie

Hazardous CCTV

Stahl's Camera System's OPEN CCTV System offers the unique option of operating CCTV equipment of various manufacturers in one system, essentially independent of communication protocols. OPEN CCTV has been designed for the combined operation of hardware in hazardous and industrial areas. This highly flexible system enables system developers and operators to overcome what used to be typical limitations: an OPEN CCTV System can integrate not only explosion-protected cameras and other technology from the company, but almost any other hardware in order to implement customised monitorspecifically ing solutions tailored to various areas of



pharmaceutical refineries, plants, etc.). The system also allows for easy expansion of existing systems, for instance if increased safety standards call for inspection windows, or require an additional surveillance e.g. of tank farms, loading bays, platforms, or cranes. Innovative zoom cameras or thermal imaging cameras can be as smoothly integrated as redundant power supplies, UPS systems, alarm processing technology (e.g. for I/O

systems) or redundant server systems.

Stahl products are marketed in Ireland through **Douglas** Controls and Automation.

The company manufactures a wide selection of explosionprotected cameras as key components of any CCTV solution. Most are based on the innovative SNF technology, where static, sensor-controlled pressurisation with nitrogen (N_2) prevents the ingress of moisture or dust into the camera interior. The cameras are therefore completely water-proof, which greatly increases their lifeexpectancy and availability. SNF cameras are furthermore extremely light-weight, compact and easy to operate, and tolerate even extreme ambient temperatures (-40°C to +75°C). The entire company's broad expertise to the design of individual CCTV systems: comprehensive knowledge regarding all methods of explosion protection ensures that the full range of technologies is taken into consideration as the ideal option for a specific application is selected. Depending on the number of cameras, recording require-ments, necessary interfaces, security patrol routines etc., Stahl can attach software of different degrees of complexi-ty to suit the individual OPEN CCTV solution. In addition to devising project-specific systems Stahl Camera Systems provides a full service up to the implementation stage, compris-ing everything except installation.

www.douglas-esl.ie/



End of an ICS Security Era



ric & Joann Byres have announced their retirement from the Tofino Security group at Belden. Eric comments: "As we reflect back on almost a decade and half in the industrial security business, we remember the wild ride it has been to create and grow both a SCADA security business and the industry as a whole. From our early days of critical infrastructure security research, to Stuxnet, to last year's release of the Tofino 2.0 product line, we have seen a lot of changes.

When we think about what we aimed to achieve, we're glad that some of our core beliefs have gained widespread acceptance. This includes the principle of "security simplicity" and the necessity of Deep Packet Inspection (DPI) for industrial protocols. We also tried to contribute to the ICS security industry overall and our work on standards, particularly with ISA, was rewarding."

Read their farewell blog here: bit.ly/1yOuYu1





Rick Roop is the this year's President of the International Society of Automation (ISA). His term of office extends to the end of 12015.



Red Lion Controls has appointed **Paul Tanner** as Vice President of Sales for Europe, Middle East and Africa (EMEA). In this role, he will drive Red Lion's efforts to provide sales, service and support to customers seeking industryleading solutions for automation, Ethernet and cellular M2M.

Red Lion Controls products are marketed in Ireland by Instrument Technology.



Richard Fathers joins MCP having gained extensive experience from working within the food industry. He was Chief Engineer with Greencore Foods, Spalding (GB).





The revolutionary iQ-R controller has arrived!

Mitsubishi Electric has launched its next generation CPU for the iQ Platform programmable automation controller (PAC). The new iQ-R series CPU offers dramatic improvements in performance, setting new benchmark standards for processing speed, delivering PC processing performance in a ruggedised industrial platform. This not only enables users to realise enhanced system designs, but also provides the basis for significant reduction in hardware costs. At the same time, the new iQ-R series offers reductions in development cost, maintenance cost and risk of system failure, while providing an innovative upgrade path that will enable users to take advantage of ongoing developments without replacing entire legacy systems.

The iQ Platform builds on the power of Mitsubishi Electric's high performance PACs, complementing this with a broad range of control modules and network interfaces. This adaptable and powerful control platform enables companies to take a strategic approach to automation and control, allowing full integration of the plant floor operations within the business functions.





For more information on our new iQ-R Modular PLC call: +353 1 419 8800, Email: sales.info@meir.mee.com or visit: ie3a.mitsubishielectric.com

