

4Sight2 Calibration and asset management software

Druck, a Baker Hughes business, delivers world-class expertise, excellence, and reliability in the toughest environments. Druck's piezo-resistive pressure sensors, pressure transducers, pressure test and calibration instruments provide our companies high performance, stability, quality, accuracy, and quick response – in any environment.

4 Reasons why Druck 4Sight2 is helping transform the Oil & Gas industry

4Sight2 from Druck, a Baker Hughes business, provides user-friendly, cost-efficient, and scalable calibration management solutions. Whether for single-use or global multi-site operations, this adaptable system empowers your organization to operate with simplicity and security, seamlessly connecting people with instruments, data, and advanced analytics.



Process instrumentation plays a vital role in Oil & Gas infrastructure ensuring smooth and safe operations. Any failure or malfunction of measurement, control and monitoring instruments can result in down-time, impact costs and productivity or impact on safety performance.

The Oil & Gas industry has evolved significantly over time, presenting opportunities to modernize and standardize the choice of instruments, adopt cutting-edge technologies, streamline processes, and upgrade infrastructure with advanced tools and equipment for testing and inspection.

How can a well-defined digital ecosystem transform your calibration and instrumentation process?

Here are 4 reasons why

Accuracy and Operational efficiency

One way to increase operational efficiency in a plant is to identify gaps and manual processes and use automation to bring standardization.

Automation can simplify complex tasks, save time, reduce cost and reduce human error. From scheduling to calibration certificate generation, 4Sight2 greatly simplifies the calibration process through digital automation. For example, if using excel to track calibration items, 4Sight2 can automatically schedule items and allocate due items in the "worklist", while at the same time performing ad-hoc calibration runs for unplanned failures. If using excel to generate a calibration report, 4Sight2 can generate a certificate in a few seconds.

4Sight2 fully integrates with Druck's test and calibration instrument range such as the PACE Pressure Controllers and temperature calibrators that can run fully automatic, full loop calibrations with no manual input or intervention from the operator. This is especially important in a test bench application where several instruments are inspected regularly.

4Sight2 is designed to enable the user to define a standard process that everyone must follow, eliminating the potential to bypass or skip steps.

For example, assets must be calibrated annually at 5 points upwards and 5 points downwards. Each point should be separated by a 25% interval and the tolerance check must be 0.5% of full scale, with a guard band of 0.25% full scale should be added for extra buffer. This can be easily achieved in 4Sight2.

“One of the many benefits of 4Sight2 are simplification and process efficiency.”

– Instrumentation technician at a gas utility company in the UK.

4Sight2 is global enterprise solution which can be hosted on a standalone PC or server allowing concurrent access to calibration and instrumentation personnel from different departments, plants or sites further making this an enterprise wide standard solution across the board.

Using accurate pressure sensing equipment is one of the first steps towards ensuring accuracy in the plant, however, accurately recording and analysing calibration data cannot be underestimated. As a complete digital offering, 4Sight2 automatically records, stores and analyses calibration data in a customizable format. The benefit of this process ensures that the true data is recorded and utilised, reducing the impact of human error and calibration time.

Compliance to regulatory standards

Calibration and asset management software can help enable operators to be compliant and adhere to industry standards, including ISO, ANSI, NEBOSH and others.

Compliance with standards often involves providing traceable documentation relating to the calibration data within the plant. This data needs to be securely stored in an audit-ready, tamper proof format and easy to access. With traditional, pen-and-paper calibration processes, this is difficult and can lead to errors. Preparing for audits can be a daunting task if dealing with paper records stacked in filing cabinets. Printed records often suffer from wear and tear over time, can be easily misplaced, lost or damaged.



4Sight2 adds digitization to the calibration process enabling users to remove paper-based processes and improve accuracy. If printing worksheets, then filling the data in excel or scanning the worksheets and archiving the paper records, not only causes duplication due to redundant tasks but also introduces human error in the process. 4Sight2 generates a calibration certificate that is digitally signed, capturing full details of the signee and the time stamp which cannot be disputed.

“4Sight2 can be customized to suit our lab requirements including two reviewers, custom reports and Druck developed customized calibration certificate template to match our format.”

– I&C supervisor, packaging manufacturer in France.

Utilising 4Sight2 as the driver for the plant's calibration process means all calibration data, and asset health (including the calibration status) for all sensing equipment is recorded. This can be accessed in just a few clicks.



Improving and maintaining quality of calibration data

Manual calibration processes have been the standard for decades, despite being fraught with inefficiencies, errors and an overall lack of quality that is expected by the modern plant. For example, a technician tasked with checking the pressure value from a gauge mounted on a pipeline will:

- read* the dial gauge,
- write* down the reading on a worksheet,
- return to the workshop,
- read* the worksheet,
- and finally type* the data in an excel or ERP system.

In this example there are four stages marked by * where human error can occur. Considering several readings for more than one instrument, the possibility of human error soon multiplies.

Instrument maintenance management including calibration and inspection is a critical activity that happens at regular intervals. It is highly repetitive in nature especially if dealing with large numbers of like-for-like instruments, which is often the case in an oil refinery.

A digital process can reduce or eliminate human error, ensuring quality results. 4Sight2, part of Druck's digital ecosystem, seamlessly integrates various high-accuracy measurement instruments, allowing digital capture of readings on Druck calibrators. The data can be transferred back to 4Sight2, digitally reviewed and a calibration certificate generated within seconds. In short, the reading that is measured by the calibrator is the reading on the calibration certificate.

Transitioning from pen-and-paper or manual spread sheet input to a bespoke software solution is proven to yield tangible cost savings.

“Whilst working with customers to digitalise their manual calibration methods, we have observed up to a 40% time saving by implementing 4Sight2 calibration management software.”

– One customer, in the process sector.

Improved quality calibration data using 4Sight2 helps drive improvement in the Oil & Gas industry, leading to more efficient outputs and higher quality and safer outcomes.

Ensuring safety and minimising risk

Malfunction or failure of safety critical equipment across the Oil & Gas sector can have serious consequences. For example, oil is often stored in containment vessels e.g. storage tankers – ships that have level measurement instruments to accurately measure the amount of oil. Failure of a level sensor can mean excess pumping of product into a container leading to loss of primary containment (LOPC) and leakage of the product into the atmosphere, a dangerous outcome.

Proper management of instrumentation is important to ensure all instruments are regularly checked, inspected, and calibrated and the data is stored in an accessible, auditable, readable format. A predictive strategy can help identify early signs of performance drift in instruments thus helping to avoid unintended sudden failures of safety critical instruments in the field and provide ample time for fault correction, and repair beforehand.

“4Sight2’s trending and analysis functions visually presents interval and annual drift analysis for all my instruments, helping to predict sensor failures. Achieving the equivalent in an excel spreadsheet took hours – using 4Sight2 took seconds.”

– Technician at a calibration laboratory

4Sight2 allows easy classification of instruments based on type, priority, process and allows plant supervisors one click access to asset reports. All data is securely stored in the database which can be regularly backed-up as part of the disaster recovery procedures, providing the user with peace of mind. 4Sight2 records all transactions and can help identify or trace activity.

Think calibration software, think 4Sight2

Druck’s 4Sight2 is the next generation calibration and asset management software that provides full visibility of all assets, reference standards and resources in the plant. It is a unique, bespoke software which forms part of a digital ecosystem that works in tandem with Druck’s test and calibration technologies to collectively offer an automated, integrated paperless digital solution.

Take advantage of the fully flexible and scalable offerings that can suit your current and future needs.

Support and contact

For all enquiries please visit Druck.com/Contact or find out more at Druck.com/4Sight2.

If you have any questions about your 4Sight2 licence, please contact us using our dedicated support email – 4Sight2TechSupport@bakerhughes.com

Experts in portable calibrators and pressure sensors since 1972

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PACE Pressure Controllers & Indicators

From the single or dual channel PACE 5000/6000 pressure controllers to the high accuracy PACE 1000 pressure indicators, Druck’s PACE portfolio delivers market leading performance and automation when paired with 4Sight2 calibration management software.



Portable Calibration Instruments

Including the “Iconic” DPI610E pressure calibrator, the DPI620G multifunction calibrator and DPI611 portable calibrator, Druck’s calibration instrumentation lead the market in terms of reliability and low cost of ownership.



Temperature Calibrators

Ideal for stable and repeatable temperature calibration, Druck’s Temperature Calibrator portfolio includes eight models varying in capability and temperature range.

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