Smart Safety

Your uptime, our experience

Support across every phase of digital transformation
– for optimised processes and zero accidents
Our promise for your digital future

Increased efficiency, cost reduction, improved safety — the pressure on decision-makers in the oil, gas and chemical industries is enormous. But digital transformation is creating new solutions to old challenges. The path to operational excellence must be filled with life, as this is a key factor in determining the future viability of companies. Many have already begun their journey towards transformation, but are looking for guidance and reliable partnerships along the way.

With its Smart Safety approach, Dräger has made digital transformation a pillar of its corporate strategy. Our long-established company supports customers with a growing portfolio of networked solutions, and a consultative approach, based on partnership and expertise in digitalisation methods. Dräger supports customers across every phase of digital transformation in occupational and plant safety, combining state-of-the-art digital technology and know-how with a 130-year tradition of reliable engineering.
Industry Challenges

THE PRESSURE IS GROWING - SMART TECHNOLOGIES OFFER NEW SOLUTIONS

If there’s been one constant in the process industry over recent years, it’s that there has not been a constant: the markets are volatile; prices are shifting from day to day, and the workforce is getting older, culturally more diverse and more global. At the same time, compliance requirements are becoming stricter and the calls for sustainable business are getting louder.

With only conventional solutions, companies can no longer cope with the changing winds of the market today. The old levers for greater efficiency, cost savings and security have been exhausted. Players in the process industry today need new answers to critical questions: How can they work faster and more productively? How can they eliminate disturbances to the process? Where can they save time and become more streamlined? And above all: How can they further increase the safety of their employees? All this against the background of demographic change, globalisation and the requirement for greater sustainability.

New solutions - targeted, future-focused and smart - are urgently sought. And this is exactly where digital transformation comes into play.
Advantages of digitalisation

DIGITAL MAKES WORK BETTER - AS WELL AS FUTURE-PROOF

Digitalisation has the potential to answer many of these critical questions. Above all, digital technologies address the industry’s key challenge: balancing operational excellence with safety excellence. This refers to a company’s ability to find new levers to continuously optimise the effectiveness and efficiency of core processes in the value chain, while at the same time maximising employee safety.

Specific applications are manifold: digital technologies can be used, for example, to execute processes remotely or to transform tedious, error-prone paper documentation into proper digital reports. This makes information more transparent and provides faster and easier access - at the touch of a button, literally. Digital solutions also allow the location and spread of people in plant sections to be monitored at all times, so that fast, targeted measures can be taken in the event of danger. All of these are levers for increased productivity, cost reductions and improved safety.

But the value proposition of digital transformation goes beyond selective improvements. At the heart of it all is its ability to generate added value from data. Digital solutions use cloud platforms to collect operational data and make it available for analysis. In this way, they not only help businesses learn from mistakes: Rather, valuable and previously unknown findings and measures for continuous process and security improvements can be obtained from the analyses. And they also hold the potential for new business opportunities.

DIGITAL SOLUTIONS PUT PEOPLE AT THE CENTRE

It is true that many digital transformation initiatives boil down to data analysis and automation. However, employees can also derive considerable benefit from them. Many companies in the industry are struggling with demographic shifts in their workforce. Experienced employees are reaching retirement age, and companies are losing their experience and know-how. Cultural differences and lack of qualifications also increase the gaps. In addition, employees are more and more likely to be globally distributed.

Smart solutions help compensate for lack of knowledge, lack of experience or geographical distances by supporting employees in their tasks. This can be done, for example, with remote tools or through automated processes that use digital tools to put step-by-step instructions into the hands of employees from different cultures and languages. This enables them to work more productively and more safely, even with lower qualification levels, which in turn contributes to the overall goal of operational and safety excellence.

STRICTER INDUSTRY REGULATIONS

Rules and regulations in the process industry are changing rapidly and requirements are constantly increasing. The topic of compliance is therefore now a major part of the operational process. It’s thus becoming increasingly difficult to prove that an operator is doing everything possible to comply with industry regulations, for example, with regard to documentation requirements. Everyone would like to be able to provide this proof more quickly and easily.
Smart technologies help companies to put their commitment to safe and reliable operation into practice.

Documentation and reporting on paper are therefore no longer efficient or secure enough to prove compliance. Paper is also prone to errors, and the capture and filing processes take a lot of time, space, money and effort. Smart solutions can certainly help here: Evidence can be digitally captured, saved and sent. In addition, solutions often “know” which processes belong in the reporting system as soon as they are requested and automatically carry out the corresponding preparatory work. This not only saves time, but the digital records are also more accurate and can be made available faster during audits.

**DIGITALISATION AND SUSTAINABILITY COMBINED**

For companies and plant operators in the process industry, sustainability is also increasingly important. Operating plants or fleets with the help of renewable energy contributes to a more sustainable and (in the long-term) cost-efficient operation. It also has important effects on reputation. Younger employees, in particular, often seek employers with proven sustainability credentials. Public perception is a factor in the competition for young talent. In addition, sustainability initiatives are also often the key to subsidies and positive ratings. Smart solutions can help to integrate sustainable energy sources and their consumption data into business processes and thus better track sustainability achievements.

**COMPANIES START THE TRANSFORMATION JOURNEY AT DIFFERENT POINTS**

The industry has recognised the opportunities offered by digitalisation, particularly regarding operational and safety excellence. But the topic is complex, and the paths taken by companies can be very different.

While some are already using practical tools or have adopted cloud technologies early on, others are starting at a strategic level. Still others need interfaces to integrate previous digital projects with new solutions or public cloud platforms. Some also take their SAP landscape as a starting point for further transformation and try to connect it with industry tools.

Guidance and consultancy for practical use-cases help companies in every phase of their transformation process.
Smart means working sustainably - through automated processes in times of demographic change.

**Dräger as your transformation partner**

**WITH SMART SAFETY, DRÄGER IS A TRANSFORMATION PARTNER FOR EVERY JOURNEY**

Dräger is a well-established, reliable and innovative partner for this journey. Although other companies may have appeared on the market earlier with their digital offerings, Dräger, a family-owned business from Lübeck, has been expanding its digital competencies for many years, both internally and through partnerships and investments in start-ups and growth-stage software companies.

With Smart Safety, Dräger has built up a steadily growing portfolio of smart solutions in partnership with customers and has developed a comprehensive range of services for digital transformation. What makes Dräger Smart Safety special is that it combines the advantages of the digital world such as connectivity, agility and user experience with the substance and thoughtfulness of an experienced German engineering company.

**STRATEGY, SMART PRODUCTS AND SERVICES - ALL FROM ONE PROVIDER**

Dräger is thus emerging as a one-stop solution provider - from strategy development, software and hardware, to consultancy and engineering services. Dräger Smart Safety supports customers in all phases of their digital transformation.

The partnership starts with strategy development. Together with customers, Dräger’s digital experts design scenarios to help customers keep their digital transformation of safety technology on track.

In this way, companies can ensure that, given the breadth of digital possibilities, they always keep their sights on the overall direction and, their business goals. Through joint strategic preparation, they can avoid wrong turns, and eliminate wasted time and unnecessary costs.

Dräger follows an open approach to digitalisation in which the customer is actively involved in finding solutions. Dräger’s digital experts first create a Minimal Viable Product that covers minimal executable functions to fulfil the customer’s requirements. Then a reality check is performed and the details are developed further together to adapt the best possible solution to the customer requirements. The advantage of this approach is that customers receive a solution that exactly meets their individual requirements.

**AGILE WORKING METHODS LEAD TO FASTER RESULTS**

Dräger not only brings knowledge and technologies to the partnership, but also modern methods and co-creation approaches that are proven and commonly used for digital projects. These include agile working methods like Scrum and Design Thinking. These methods enable a much more effective implementation. Metaphorically speaking, Dräger works using the rhythm and pace of software release cycles, which moves much faster than hardware development. This gives customers the advantage of being able to implement solutions earlier.
SMART SOLUTIONS - PEOPLE ARE THE FOCUS
When developing its product portfolio, Dräger always starts from the specific needs of individuals and the practical benefits they can deliver. Dräger's smart products are therefore robust, on the one hand, and simple and intuitive to use on the other. This clearly distinguishes them from many of the products offered by competitors.

Dräger’s principle here is that success in digitalisation depends considerably on how well smart solutions are accepted by people. Users in industrial environments should also be able to work with modern interfaces they enjoy using and which help them intuitively and reliably in their daily tasks. Only this way efficiency and security can really be increased. To meet this demand, Dräger works with its own design team which focuses on user experience and continuously improving usability. Dräger understands how to think and develop digital solutions from a human point of view and how to incorporate individual requirements.

STANDARD INTERFACES - SEAMLESS INTEGRATION
Another cornerstone of the Dräger approach is our support for standard interfaces. After all, one of the first questions customers often ask is: We have already set up our own systems, can we connect them to your solutions? Since Dräger follows the philosophy of standardised interfaces, this is possible at any time. For customers, this has the advantage that they can continue to use their systems seamlessly and integrate them with Dräger systems without the need to spend time adapting the interfaces. This saves time and money, and the solutions work more smoothly together. And finally, the data remains accessible for further analysis.

DIGITALISATION GOES BEYOND PROCESS IMPROVEMENTS
Digital solutions help improve processes and security in many areas. But that is only one aspect of digitalisation. Dräger’s data specialists always keep an eye on long-term opportunities when they work with customers to develop solutions. We help with carefully analysing the data generated when working with digital solutions and in networked environments, storing it securely and preparing it for analysis using cloud platforms. These analyses not only generate ideas and approaches for better safety and efficiency related decision making at customer side, they also provide clues for further systemic changes and new business opportunities.

Smart Safety solutions reduce cost and time pressure.
We develop our portfolio in partnership with our customers to address their needs faster and more precisely - that's what we understand by Smart.
Dräger Smart Safety In Use

Together with customers and partners, Dräger is developing a range of solutions for use cases as part of the Smart Safety approach, which enable companies and plant operators to quickly realise tangible benefits. Here are a few examples:

1. Process Support
Digital solutions can make numerous, formerly paper-based processes more efficient and secure. For example, they support CSE clearance measurements by means of digital data transfer from field devices to the control centre. Digital data transmission also allows tasks to be planned, controlled and checked from the control centre. In addition, the transmitted information can be automatically included in reports, and the data can, in turn, be analysed and lead to new process improvements. All this leads to processes being executed faster, more efficiently and more securely.

2. Asset Management
Smart solutions help to automatically maintain an overview of the status of all gas detection devices in the plant, as well as their condition. Maintenance and test procedures are simplified by digital solutions, as they keep track of maintenance intervals and test data. Results are digitally documented and the corresponding certificates provided. Thus, compliance evidence is easier to store and submit. In addition, companies can also organise the deployment and distribution of equipment more efficiently. The company saves costs and always has full control over its investments. Active asset management via digital solutions means data analytics allow smarter maintenance procedures. Efficiency is driven by the possibility to deploy predictive maintenance as well as firmware updates that can be uploaded via remote access.
3. Visualisation
With the help of visualisation solutions such as live or heat maps or exposition charts, companies and plant operators can monitor critical areas of their facilities in real time. At any time, they can see temperatures or gas concentrations at certain locations. Incidents can be detected more quickly, so in case of an emergency alarms are triggered and employees can be evacuated before the danger becomes acute. In the event of an incident digital solutions show where people or equipment are located, as well as their condition. And in day-to-day use, visualisation solutions help to monitor the exposure data of employees and support the identification of workplace hazards, and consequently, the adjustment of risk assessments.

4. Alarm Forwarding and Incident Reports
In an emergency, minimising negative consequences is the key to risk mitigation. When an alarm is triggered Smart Safety solutions help organisations to react quickly. Counter measures like alarm forwarding or access bans are activated, and other immediate aide can be triggered centrally. Smart solutions enable, for example, geofencing measures to be carried out efficiently, and rapid rescue and evacuation measures to be initiated and controlled. Data analyses based on digital incident reports also increase security by generating online risk assessments, enabling decisions on targeted countermeasures to be made. Relevant information can also be stored for proof of compliance.
5. Data Analysis
The IIoT and connected devices create enormous amounts of data. An added value of digital technologies is in the extended use of this integrated data. Smart Safety solutions analyse measured data like average concentrations, alarm levels or peak values, and device data such as test or status values and errors. Predictions and improvements can be derived from data patterns. Subsequently, impending failures can be prevented before they occur; and leaks and defects can be detected before they lead to serious damage. Data analyses also provide approaches for improvements that operators have not even thought of yet and which only become apparent following this analysis. Data analysis thus provides useful input for improving entire processes and demonstrating compliance.

6. Plant Safety
Digital solutions help to improve plant safety holistically. Large plant areas or areas that are difficult to access can be monitored without interruption. For maintenance works or in the case of an incident, short-term or temporary installations are possible efficiently and safely. Signals are transmitted reliably and without errors even under difficult conditions. False alarms are prevented more efficiently than ever before. The data generated in the process is more error-free than with manual transmission and can be used for analyses, e.g. for optimising maintenance processes. The plants become safer, and their operation more cost-efficient.
Our Value Proposition

MORE THAN 130 YEARS OF TECHNOLOGY FOR LIFE
Dräger is a trustworthy digitalisation partner for companies in the process industry because the company succeeds like no other in bringing together two worlds: on the one hand, digitalisation with its ideas, methods and future potential; and on the other, the substance and level-headedness of a family-owned company geared towards German engineering virtues, which has been developing innovative solutions for its customers for more than 130 years.

This experience was and remains enormously valuable to customers. Especially when it comes to challenges - such as precise and reliable measurement of a variety of hazardous substances - Dräger has always been a first and safe point of contact for many. Customers can always be sure that the experts at Dräger use all their experience to solve their problems and achieve reliable results. This traditional Dräger value proposition also applies to the digital world - in line with the Company’s driving principle: Technology for Life®.
Outlook

The future success of companies in the process industry will depend on how well they manage to master digital transformation. Digital solutions are undoubtedly one of the most important means of becoming more efficient and secure in the future, as well as meeting the global challenges of an international workforce, demographics, sustainability and competitiveness.

With Smart Safety, Dräger is making an essential contribution to the digitalisation of plant operations. Dräger’s solutions and services play a key role in helping customers achieve their goals for operational and safety excellence. They make processes more efficient, employees safer and organisations ready for future innovation.

Dräger has made digitalisation an integral part of its corporate strategy. The company will continue to drive forward the networking of its portfolio and will continuously build up new expertise to remain a proven partner to its customers on this journey, just as it has been for 130 years.