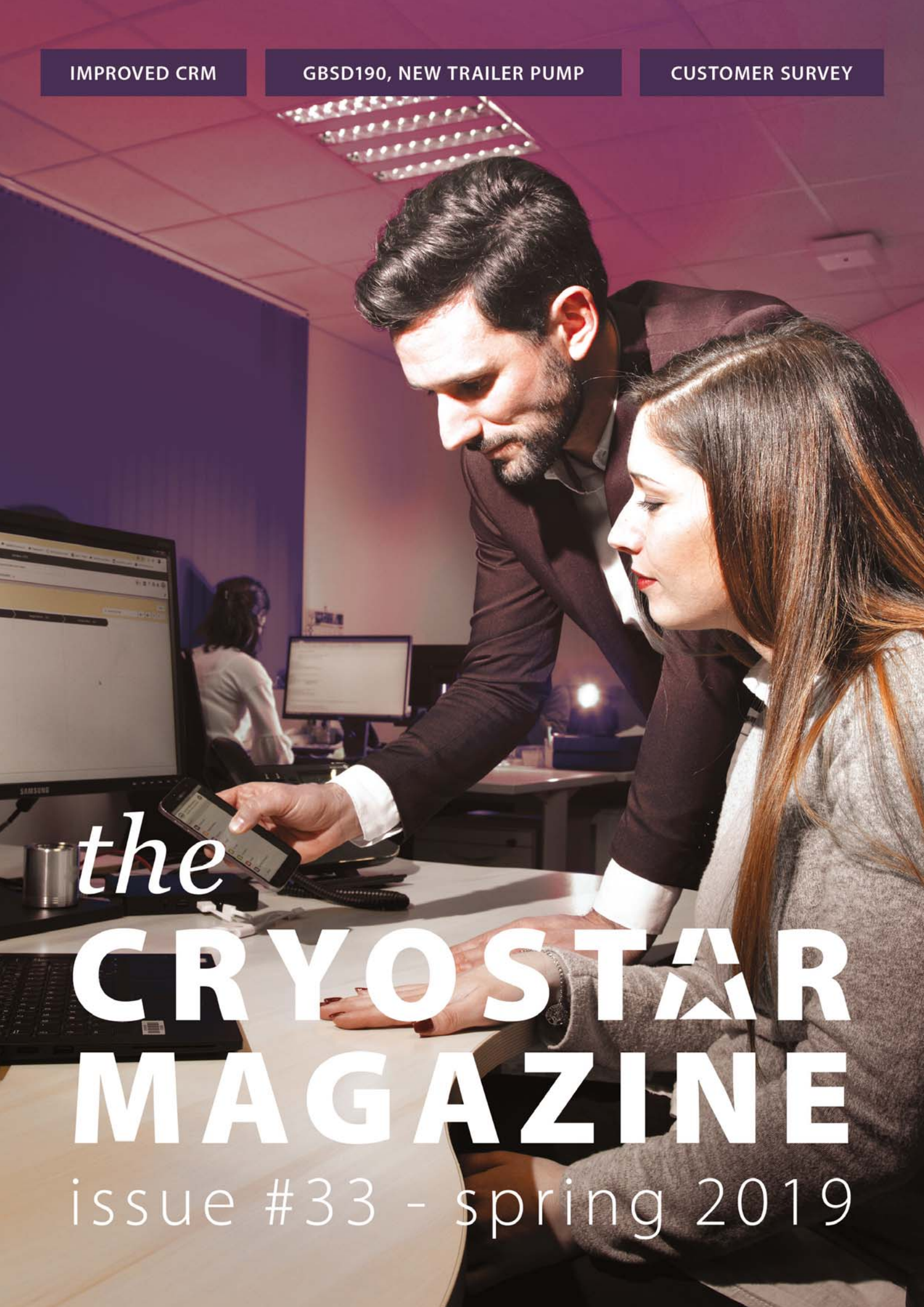
IMPROVED CRM

GBSD190, NEW TRAILER PUMP

CUSTOMER SURVEY



the CRYOSTAR MAGAZINE

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Over the course of its more than 50-year history, CRYOSTAR has experienced significant business growth on multiple occasions, each of which has provided the company with an opportunity for improvement.

CRYOSTAR surpassed €100 million in sales in 2005, €200 million in 2012 and has now surpassed €300 million. This constant evolution has been marked by repeated important successes on the majority of the company's markets. CRYOSTAR's main method of handling a high level of growth is to have an organisational system that allows for flexibility and reactivity. This is not always sufficient, however, as growth often comes hand in hand with new challenges.

The first challenge is to integrate the many new employees into all levels of the organisation. This is why particular care is taken, during recruitment, to attract people with the talents and skills that will be needed in the years to come. It is equally important to retain these employees, which we do by offering our staff optimal work conditions and career development options.

The second challenge has to do with the tools used for work, notably in terms of IT, as it is essential to replace and update management software (ERP). It is also important to update our IT platform for the management of data and technical documents or PLM (Product Lifecycle Management), in order to ensure CRYOSTAR's continued technological leadership. Along the same lines, a new CRM (Customer Relationships Management) system, the subject of an article in this Magazine (see page 3), has been implemented.

This leaves the important challenge of infrastructure, as with increasing opportunities comes the need to install additional production and office spaces and testing equipment, on a site with a limited amount of space.

Successfully taking on challenges is part of CRYOSTAR's DNA. As we have done before, we will meet these new challenges with passion and enthusiasm, ensuring we are able to provide a satisfactory response to our customers' growing trust in us.

Samuel Zouaghi

PRESIDENT

summary

CRM | CUSTOMER RELATIONSHIP MANAGEMENT

One of the lessons we learned from our recent Customer satisfaction survey (see article on page 9) is that we need to develop and improve our relationship with our clients.

Our recent decision to deploy a new CRM (Customer Relationship Management) system is thus an important step in the right direction.

CRYOSTAR has long been a forerunner in this field, since as early as 2008 the company launched a Customer Service-based CRM project. The creation of a platform (team) dedicated to this tool allowed CRYOSTAR to develop a better method of tracking customer activity, all while improving the efficiency of various tasks associated with customer relations.

OBSERVATION

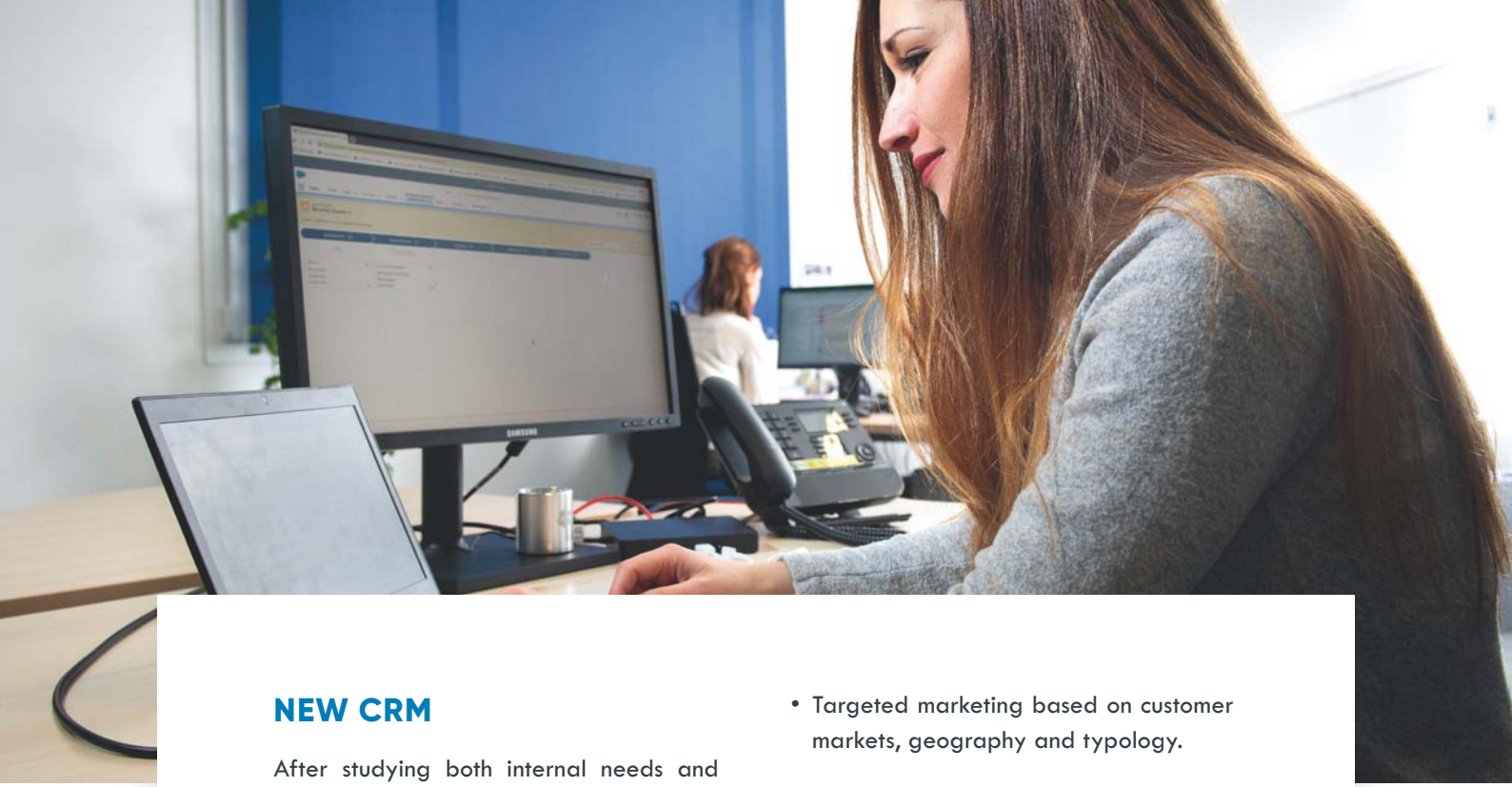
Over the course of the last ten years, however, CRYOSTAR's volume of business and number of employees have both increased, as has technical complexity.

At the same time, computer science technology has experienced exponential growth with the widespread use of smartphones and tablets, the appearance of cloud computing and the development of Artificial Intelligence.

Given the current context, users have more (and more precise) needs, and CRM tools have developed greatly.

Technology has also evolved via social networks and different web platforms, and users have ever-greater expectations in terms of ergonomics, speed and mobility.

In other words, the CRM tool from 2008 was no longer meeting the needs of the company or its clients. It was clearly time for a change.



NEW CRM

After studying both internal needs and client needs in detail and then comparing the CRM solutions currently available, CRYOSTAR opted for "Salesforce", the uncontested leader on today's market.

The first step was to define the principal objectives:

- Develop client-focused processes, improve user feedback, centralise information by making it accessible to people in regular contact with customers.
- Have global visibility with reliable, up-to-date information in order to better respond to clients' needs or even anticipate them.
- Improve efficiency via a secure cloud platform accessible from a PC, a tablet or a mobile phone.

ACTION PLAN

Various CRM modules will be put in place progressively. First, in 2019:

- Commercial activity for the sales of machines, spare parts and service, with the "Sales Cloud" module, which will allow us to improve the sales process.
- Customer support through the implementation of the "Service Cloud" module, designed to ensure that client requests are consistently followed up on, particularly in the Customer Service context.
- Targeted marketing based on customer markets, geography and typology.

Other modules will then be integrated providing for the management of on-site interventions (the "Field Service" module) and the "customer portal", which allows clients to connect directly to the CRYOSTAR CRM via a web browser and create their own commercial requests or questions via the portal, which can provide CRM information directly.

Another area that calls for further development is the Internet of Things, which consists of placing sensors on our machines to provide information on their operation and then transfer said data to the CRM to proactively offer the client a solution to a latent problem detected in the machine or propose spare parts that may be needed in the short term.

The CRM offers numerous opportunities for improvement in both commercial and technical exchanges with customers, and represents a meaningful project for CRYOSTAR. It prioritises both the improvement of customer relations and work ergonomics and, by the same token, the effectiveness and efficiency of our employees who are in contact with the actors in our markets.

25 years of adventure !

MILLENNIUM

Millennium is the name of the ERP program developed by and for Cryostar. The program has evolved substantially over the years- the most important steps in this evolution are described below.

The story began in the early 1980s with a Burroughs mainframe and accounting, purchasing, inventory management and work-in-progress programs using COBOL, which were developed by a computer engineering service company (SS2I).

In 1994, Cryostar took two major steps forward when they began using a new Unisys A-Series mainframe and developed a new accounting and production application. In 2000, the ERP was christened "Millennium". That same year a computing department was created, consisting of three developers and two network managers.

In 2001, with the advent of the age of PCs, Millennium left the world of character-oriented terminals behind, and began using a more modern graphic environment.

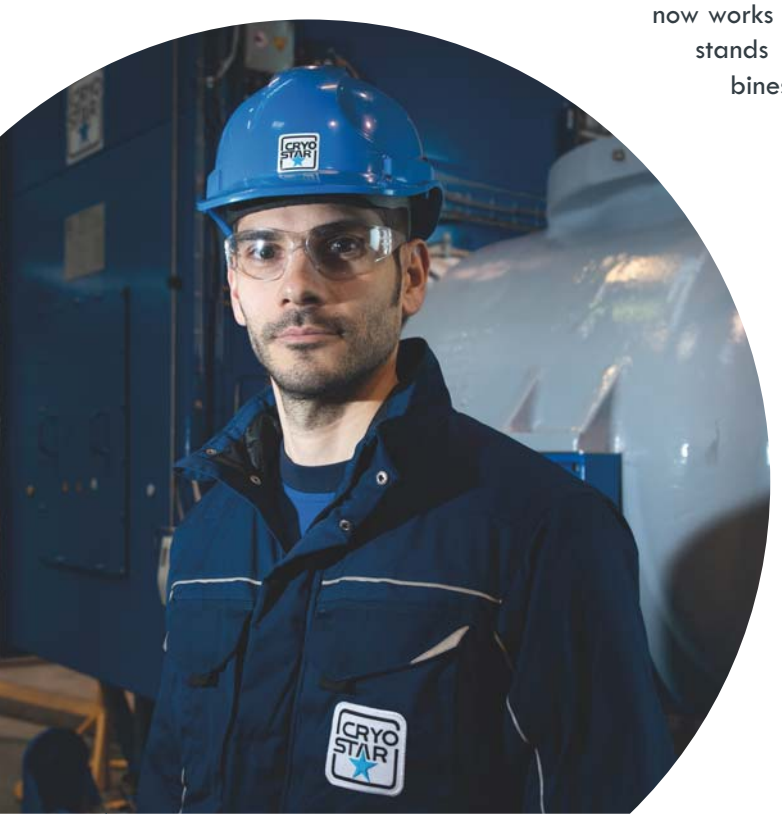
What follows is a long list of integration:

- In 2002, they integrated a Part Data Management module for technical data management, along with a Commercial Management module.
- Faced with increasing activity in various business centres, Millennium was deployed first in California, then in Pennsylvania, the UK and Singapore. Millennium became a multi-site, multilingual program.
- In 2003, Cryostar set up an e-procurement portal for managing supplier bids.
- In 2004, Millennium left the closed, proprietary world of Unisys for Windows, allowing Millennium to create Office documents and making the SQL database accessible to third-party applications via standard protocols.
- In 2005, an e-Business application was released, allowing customers to order spare parts online.
- In 2007, Millennium integrated a planning tool, PsNext.
- In 2009, parts inventory moved into the era of automation, with a new automatic storage system. Millennium integrated Copilote software, allowing parts to be handled using bar codes.
- In the same year, it integrated the CRM Update application, allowing Cryostar to better meet the needs of its customers.

Since its founding in 1994 Millennium has grown continuously, always evolving to meet new needs and working passionately to contribute to its clients' success.

MANAGING TURBINE TESTS

In this new series, "A day with…", we focus on the responsibilities and daily activities of David Vogt, team leader within the turbomachine test bench team.



David has been with Cryostar for 10 years. After his start in the pumps and turbines Repairs Department, which included on-site work, David joined the Turbomachines Test team five years ago. After two years as a tester, he became team leader, the position he still holds today. David now works with 3 different test stands dedicated to turbines and compressors.

As a leader in the high technology sector, it's important that Cryostar continues to prioritise innovation, developing solutions and equipment that are ever more efficient and better adapted to clients' needs. An essential step in the validation of these innovations is of course testing, which ensures the quality and performance of our machines.

As a team leader, David handles a wide range of tasks and responsibilities. He acts as a logistician, collaborating with the scheduling department to organise tests, propose deadlines and coordinate a sequence of testing that allows for a maximum number of machines to be tested at the three benches. He must also organise and oversee the different phases of preparation, which include installing the machine into place, conducting a complete check against the drawings and installing equipment and connections (piping, electrical cables, water, oil, vibration measurement tools, alignment).

If the machine being tested is new or particularly complex, an internal test must be conducted first, in order to verify the machine's performance and mechanical behaviour. Internal tests can also be used to carry out specific campaigns for Research & Development projects or to measure vibrations (an area in which there is always room for experience gathering and improvement). Next, it is time to test the machine in front of the client, and occasionally also in the presence of an inspection authority. This test follows a pre-planned sequence of procedures that were validated together, and a test report is produced at the end. Finally, the machine is disassembled for further inspection.

In the case of an incident, proper root cause analysis, investigations and improvements must be carried out to ensure that equipment meets client expectations and a smooth commissioning.

As a team leader, David is responsible for both the safety of the tests and of the members of his team. He is also in charge of communicating goals, meeting client expectations and requirements, ensuring communication between departments, providing technical support to his team, training team members, verifying the application of procedures and prioritising tasks, particularly in the case of any delays.

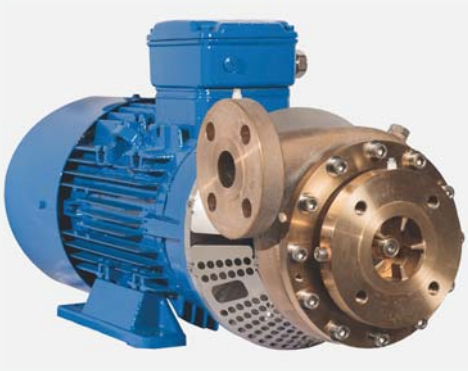
Training is essential, because the career of "tester" is not something that one can learn at school. Tester training is lengthy and can only be done internally. Often, a tester will have already cut his teeth in machine assembly or repairs, or occasionally during on-site commissionings . No matter his or her background, a tester must be versatile and have perfect knowledge of how the machines operate.

In his position, David communicates internally with numerous departments: the research department (for machine performance and vibration data), production (which is the step before testing), quality assurance (for test procedures and specifications) and supply chain (for logistical purposes). He is also in contact with clients and designated inspectors, who assist with and verify the compliance of testing.

David is fully aware of how important testing is to Cryostar. Indeed, testing is in a way the capitalisation and improvement centre of the company, ensuring the compliance and integrity of the equipment. Above all, it is a major asset for technical progress, innovation, and Cryostar's continued position as a leader in high technology.

GBSD 190

A promise kept



GBSD 190: discharge pressure of more than 40 bar and a flow rate of almost 800 L/min

Cryostar is pleased to announce the official addition of the GBSD 190 to its extensive line of centrifugal pumps for trailers. This pump is sure to find pride of place alongside the GBS 155, which maintains its position as market reference.

It took Cryostar more than two years to develop this new pump, based on client feedback and our own experiences. We adhered to the initial guidelines established for the GBSD 190. Our technical teams succeeded in improving the discharge pressure, the range of flow rates, the output and its resulting power, in a machine of a similar size to the GBSD 185, all while maintaining the same centre-to-centre distances in the fittings to facilitate the installation of the new machine.

The entire machine was re-examined. The cold end is entirely new, and significantly more advanced with the double volute foundry design.

These improvements, along with the suction flange that includes a "homemade" anti-vortex device, result in a machine that is noticeably better in terms of both vibration level and robustness in difficult operating conditions.

The motor assembly, which includes a completely redesigned 40 kW motor and an improved coupling, combine with the new cold end to offer our clients increased productivity and a better TCO (total cost of ownership). This machine is at the top of the line that also includes the GBSD 155 and GBSD 185, offering superior capacity that can meet the need for a high-pressure pump.

Designed to deliver high-pressure tanks, this pump offers even more discharge pressure with a 70% higher flow rate. For low- or medium-pressure applications, the flow rate is more than 50% higher. The development plan included field testing by some of our clients. As soon as they started using the machine, the users informed us that they had noticed a more robust, more powerful operation. In order to fully validate the development of the new machine, we continued trials for more than a year, including analysis of both automated data and regular user reviews. Well before the pump's official release date, it had already met with user approval and more than 30 machines had been built. We hope it will have the same success as the GBS 155: as of this year, more than 7500 of these units have been installed since the machine's launch in 1983.

We also took advantage of this in-depth analysis and development project to improve our installation and start-up guides, which we now include in the packaging when we deliver our machines. Cryostar wishes not only to produce high quality equipment, but also to provide a global customer experience in which we accompany the client during the product's entire life cycle. This is why we also emphasise the importance of documentation and offering services to our clients.

Instrumented prototype of the GBSD 190 on our test bench in Hésingue, France.

CLIENT SURVEY

AREAS OF IMPROVEMENT

In order to fully satisfy our clients, it is essential for us to understand not only their needs and wishes, but also their perceptions and opinions of key vendors such as Cryostar. Of course, we can gain some insight from our day-to-day interactions with clients during the sales, project execution and machine start-up phases, but Cryostar wished to take things a step further…

…which is why Cryostar chose to fund a survey with the following goals: to objectively measure client satisfaction with the products and quality of service provided by the company, to determine the company's position with relation to competitors, to gain a clearer understanding of what clients see as the company's strengths and areas of improvement, to identify any possible disparities in comments based on the market or client's geographic location and to encourage staff to take ownership of the results by means of a "mirror" survey aiming to compare internal perception with client perception.

This survey was conducted by telephone in October and November 2018, with a total of 157 interviews carried out in English, French and even Chinese. The responders were primarily engineers, technicians, distributors and buyers, of whom 66% were end users of Cryostar machines. Nearly 70 questions were asked over the course of the survey, which lasted an average of 30 minutes. 429 company employees participated in the "mirror" survey.
Six main topics were addressed:

- The client's relationship with CRYOSTAR during the sales phase
- The client's relationship with CRYOSTAR during the project execution phase
- On-site work carried out by CRYOSTAR
- Requests for spare parts from CRYOSTAR
- CRYOSTAR products
- Information from/communication with CRYOSTAR

With questions regarding:

- Overall satisfaction
- CRYOSTAR's company image
- The evolution of customer service as perceived over the course of one year
- The likelihood that the client would recommend our products or services
- Competitive position in terms of products
- Competitive position in terms of services provided
- Suggested areas of improvement
- The client's major "challenges"
- The client's intention to purchase from us in the next 12 months

This study, the results of which were shared with all Cryostar employees, provided us all with a better understanding of market expectations in all areas of client relations and, at the same time, allowed us to compare client perception with employee perception of said relationship.

Cryostar now wishes to capitalise on this survey to make improvements, becoming ever closer to our clientele and meeting or even exceeding market expectations. We have developed a progress plan with specific goals we aim to achieve over the course of 2019. This plan mobilises our employees around a precise understanding of Cryostar equipment users' expectations.

New building, called
"HYDROGEN"

Faced with significant gross across all sectors and markets, CRYOSTAR is at an important crossroads. It is crucial that the company reinforces the organizational base- on both a structural and a human level- to take on the important challenges the company is sure to encounter in the next three to five years. Several large-scale projects such as the modernization of the IM and IT infrastructure as well as a major investment program have already been launched.

The first step was taken during the second semester of 2018 with the construction of a new office building called Hydrogen, which can host up to 50 collaborators.

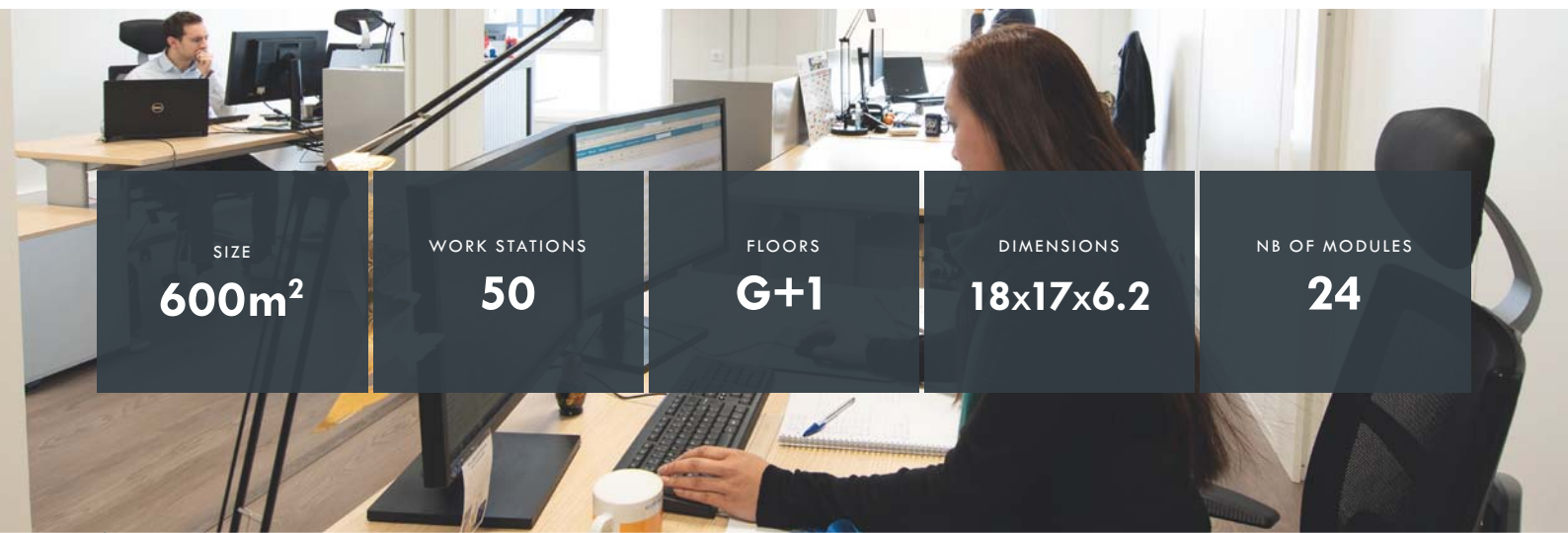
Numerous employees joined the company over the course of 2018 and even more will be joining in 2019. In response to the resulting demand for new workspaces, it was necessary to find a fast, easy-to-implement solution- which is why Cryostar opted for a modular building.

Aware that modular construction can sometimes be less comfortable than traditional buildings, in order to provide its collaborators with a pleasant workspace Cryostar chose to use top-of-the-line modules. 2 modules were needed to constitute a surface of nearly 600 square metres across two floors, a ground floor and a first floor. The building was built and arranged specifically for Cryostar's needs, both in terms of office setup and electrical/digital installations.

During the project execution and thanks to the excellent collaboration among CRYOSTAR, and the twelve companies that participated in construction meant that the building was delivered and collaborators were able to move in a mere two months after foundations were laid.

To make this building more aesthetically pleasing, the entire structure is covered in larch cladding. In order to decrease the building's carbon footprint, heating and air conditioning is handled by a low-consumption heat pump system, in accordance with the RT2012 regulations. The high-quality construction results in a simple, well-lit work environment.

This new building is currently home to the Business Unit Process Machinery, in particular the TSS team (Technical Sales Support), Process Solutions departments, Instruments and testing, as well as project managers. This first step is only a hint of the changes to come…



NEWS

A RECORD NUMBER OF ORDERS IN JANUARY

2019 is off to a roaring start, with more than €77.4 million in orders!

New equipment accounts for €63.2 million in sales, with a high proportion of the projects based on LNG- in particular, the equipment for some fifteen LNG carriers.

Service activity was also particularly intense, with €14.2 million in orders.

This solid start to the year reaffirms Cryostar's leading position in both the LNG and the industrial gas industries.

CRYOSTAR CELEBRATES THE LAUNCH OF ITS FUELNG-DEPLOY CONCEPT

Cryostar celebrates the launch of its FUELNG-DEPLOY concept.

The inauguration, held last March 21st in the Netherlands, took place at the LNG filling station of our client ROLANDE, the buyer of the first unit of our new FUELNG-DEPLOY LNG filling station concept. This compact, modular, easy to transport LNG filling station represents Cryostar's latest technological advances in the domain of LNG road tractor refuelling. This new concept is an optimal solution for gas/transportation clients wishing to distribute liquefied natural gas, as it provides greater flexibility in terms of both LNG consumption and the location of the station. This event provided an occasion for the many clients and visitors in attendance to see the concept in its full size and visit the station, and gave us the chance to hear feedback from our client, whom we thank once again for their trust and numerous years of collaboration with Cryostar.

THE "HERCULE" DIGITAL PROJECT

CRYOSTAR will deploy new management tools in 2019 in order to optimise global performance, provide our employees with high-performance tools, improve the efficiency of our processes, standardise reference documents and improve customer service and the everyday experience of our users.
In addition to a **new CRM (Client Relations Management)**, which is discussed in an article on page 3, a **new ERP (Enterprise Resource Planning)** that includes sales administration, purchasing, supply chain and manufacturing, quality and traceability, finance and business intelligence processes, a **new HR information system (HRIS)** and a **new PLM (Product Lifecycle Management)** for technical and documentary data will be progressively introduced over the course of the year.
This project thus concerns all aspects of management and, consequently, all departments in the company.

Cryostar employees retired

Recently, the following people have retired. We wish them a long and peaceful retirement.

NAME		RETIREMENT DATE	JOB TITLE	SENIORITY/ YEARS
LOLL	MARCEL	31/07/2018	Customer service support	41y 3m
HEITZ	PASCAL	28/02/2019	Head of turbine production & testing	39y 5 m
RIVELLO	DOMINIQUE	31/12/2018	Foreman turbine assembly	32y 8m
HASSLER	BENOIT	31/10/2018	Responsible supply management	28y
MARQUE	GERARD	31/12/2018	Responsible project execution	14y 7m
STIEGER	DANIEL	31/12/2018	Testing technician	14y 7m
PERICHAUD	BRUNO	31/07/2018	Forklift driver	11y 3 m

BRAZIL

CHINA

FRANCE

INDIA

RUSSIA

SINGAPORE

UNITED KINGDOM

UNITED STATES

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