

## magazine Where Innovation is Tradition

December 2014



Innovations
 Simple Technology
 Without Sacrificing
 Functionality

PortraitFounder withEntrepreneurial Vision

Special topic Vocational Training: a Highly Rated Asset



#### **Contents**



The lion dance is a traditional form of entertainment in Chinese culture. It is performed at important festivals and celebrations.

SAMSON magazine Issue 18

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**Editorial** 

We can do it

**Innovations** 

Simple Technology Without Sacrificing Functionality

**Portrait** 

Founder with Entrepreneurial Vision

Report

From Small-scale Research to Real-life Installations

Special topic

Vocational Training: a Highly Rated Asset

**Impulse** 

Interview with Andreas Widl

Facts and figures

Investing in Sustainable Growth

Spotlight

From Design Engineer to Chairman of the Executive Board



#### We can do it

Dear Readers,

The companies of the SAMSON GROUP develop, manufacture and sell their complexly engineered products worldwide and provide after-sales services close to the customer. Even though the main focus of our company is always on valves and instrumentation, we put our staff first. The workforce of a company is the true asset of every organization. This is especially true at SAMSON.

Since joining the company, I have met a lot of great, highly skilled people in the German sales offices, the subsidiaries abroad as well as at the headquarters in Frankfurt: people who enjoy going to work, who fully identify with our unique company, who are committed, who contribute with their own ideas to the good of the customer and do their bit to make sure SAMSON keeps evolving; people of all ages, with different interests and of various nationalities who are responsible for making the SAMSON GROUP what it is. Their qualifications and skills, their diversity and personal commitment are the key factors to our long-term success.

Human understanding turns data and information into knowledge. The creativity of individuals and the open-minded exchange of information between them create a fertile breeding ground for innovation. Innovation is the foundation for our sustainable growth. Customer focus, on-time delivery and the highest quality standards are what it takes. New products, services and business models arise from innovation. People transform these abstract models into business relations that work

and help establish long-term trusting partnerships. All in all, these are reasons enough to underline the key role played by our staff and to appreciate their individual accomplishments. We have drafted corporate core values to meet these challenges.

In principle, all companies of the SAMSON GROUP are able to offer safe, attractive jobs. We act responsibly towards our business environment, we manage within our own means, we develop and manufacture fascinating products, and we are in business in over 40 countries on all continents. Our staff are trained and presented with challenges and objectives.

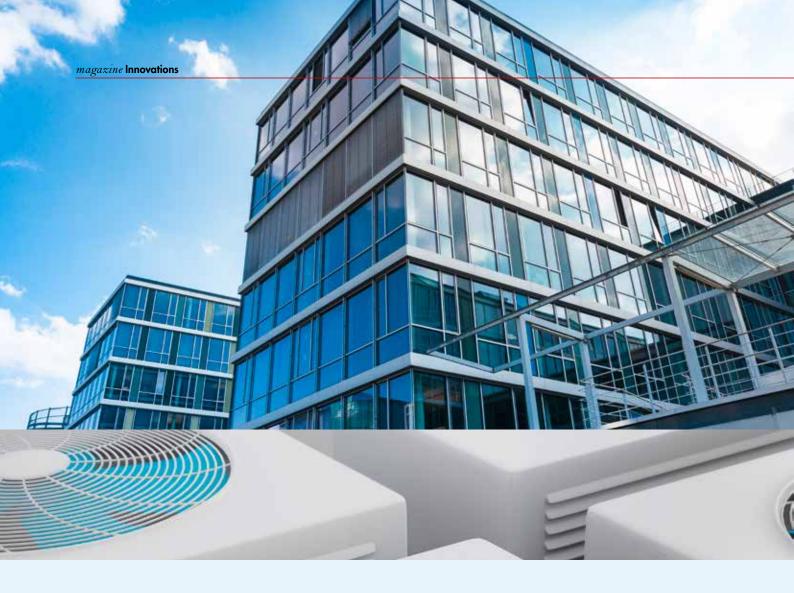
On the following pages, you can find out more about the companies of the SAMSON GROUP and their products. The magazine also features the people who work for the SAMSON GROUP. After all, there is at least one bright mind behind each of our achievements, contributing to what makes us successful.

I hope you enjoy reading this magazine.

Dr. Andreas Widl

Member of the Executive Board Sales, Marketing and Strategy

Andreas Will



## SIMPLE TECHNOLOGY WITHOUT SACRIFICING FUNCTIONALITY

Turning taps on and off is still commonplace in many heating and cooling processes. Simplicity often ranks higher than possible energy savings in these installations. Yet, there is true potential for improving the efficiency of these installations waiting to be unleashed since a considerable share of the primary

energy is wasted on implementing such control tasks. SAMSON's new Type 5724-8 Electric Actuator with Process Controller resolves the predicament between simple operation and efficiency. The device implements finely tuned closed-loop control, resulting in the optimal use of the heating or cooling

energy. This is achieved using an exceptionally simple setup without the need for a switching cabinet or additional wiring: the entire control logics are integrated into the actuator and the sensors are ready-wired to the actuator. Start-up is completed within minutes. The purchase price is amortized very quickly.

#### 100,000 euro annually

The idea for the actuator came about in a meeting with a large rubber and elastomer manufacturer. In the manufacturer's coating plant, plastic is spread over the fiber fabric and cured in an oven. The use of this kind of composite material is commonplace these days. For example, high-pressure hoses, drive belts, conveyor belts as well as life rafts, molded pads and the interior trim in cars are all made of such composite materials.

Elastomers are joined together with the textile fibers at high temperatures and pressures. After hot-pressing, the heat is quickly withdrawn again by passing the material through water-cooled rolls. "Up until now, the cooling water supply was controlled according to the on/off principle instead of based on demand," recalls Mr. Rainer Schwan, the product manager in charge. "Our new electric actuator with process controller controls the supply of cooling water according to demand. These days, cost savings of up to 60 % in cooling energy are achieved in the elastomer coating plants as well as in other applications. A total of

EUR 100,000 is saved every year in this factory alone alone."

## Simple solution with added value

The key to saving energy is to control the

temperature difference of the cooling water before it enters the machine and on leaving it. Sensors on both pipes connected to the cooling roll measure the temperature. The sensors are directly connected to the controller, which is integrated into the actuator mounted on the supply valve. With the aid of suitable accessories, the sensors can be mounted directly on the pipeline or immersed in the cooling water to measure the temperature. The set point entered in the controller is used to ensure that only the amount of cooling water actually needed is supplied. The sensors have red and blue cables to facilitate correct connection: the blue sensor is placed in the supply pipe for cooling applications whereas the red one is used for heating applications.

"A lot has already been gained by such a control function, but we have taken things one step further," explains Mr. Schwan and describes a typical R&D process at SAMSON: The solution to an actual problem encountered by a customer has been developed further to create a

product containing

additional functions, which can solve control problems in other applications with different requirements. The resulting Type 5724-8 Electric Actuator with Process Controller includes two PID control modules, which can implement fixed set point/follow-up, override, cascade or switching control modes. An additional pump output is available for demanding control tasks.

#### Fast start-up

The decisive advantage of the actuator, besides its control functions and compact design, is the fact that it performs its control task without the need for additional wiring or a switching cabinet. Such cabinets are expensive







figuration and operating software, TROVIS-VIEW. Engineering staff simply need to select the system code number in TROVIS-VIEW and transfer the configuration to the actuator." He continues: "The ready-to-use configuration means that the basic engineering for the application is already completed. Operation of the software is intuitive. Settings are easily changed. By bringing sensors, controller and actuator together into a compact unit, operational errors, which can happen on setting parameters and during start up, are ruled out right from the start."

#### Convenient data management

All device settings for control functions, device and system documentation as well as process data logging can be read and edited



Typical control tasks performed by the electric actuator with process controller include controlling the temperature in pasteurization processes in dairies. The milk is briefly heated up to extend its shelf life.

on a computer. Data can be easily saved to a Microsoft Excel® file. The computer merely needs a Bluetooth connection in version 2.1 or higher. Several values or process flows can also be entered. For example, the electric actuator with process controller is used in dairies to control the pasteurization process in which exact temperatures must be achieved in the control loop over the course of a certain time.

Set points and limits can also be changed at the device itself. For this purpose, the actuator is fitted with a control panel with display. Only the most important functions can be changed at the control panel to keep operation in the running process as simple as possible. It also allows users on site to read the process variable, enter

a set point or change the control mode. Special functions facilitate start-up and electric override of the actuator. In case of a power failure, the valve can be positioned manually using a small handwheel.

#### Ideal for district heating stations

The linear actuator allows for finely tuned control between the range of 0 and 100 %. It has proven its worth in numerous applications, running maintenance free for up to 15 years. The actuator is very versatile. It can be combined with various globe and three-way valves as well as self-operated differential pressure regulators for industrial applications and in the automation of buildings. Combined with a self-operated regulator, it is ideal for distributed district heating and

cooling substations. In the supply networks, the regulator with electric actuator is responsible for ensuring that the differential pressure of each supply control loop remains the same to ensure that the heat energy is evenly distributed within the entire network. The device assembly can also be used to control the flow rate in addition to the differential pressure. Control based on the outdoor temperature can be implemented using outdoor, flow and return flow sensors. Putting the benefits of the actuator in a nutshell, the product manager concludes: "Compared to conventional control solutions, this SAMSON device drastically simplifies the control task without sacrificing functionality."





#### Founder with Entrepreneurial Vision

"Finding a new solution to a process engineering challenge" could be the motto of PFEIFFER Chemie-Armaturenbau GmbH. It was such a solution that marked the beginning of the company's history and later, other solutions often gave rise to new products and manufacturing methods. Corrosive liquids and gases as they are used in chlorine service for example, were the original challenge Mr. Horst Pfeiffer, the founder of PFEIFFER Chemie-Armaturen GmbH, faced. They destroy metal in no time at all. The valves needed to be lined to protect the metal surfaces inside them. Up until the 1970s, this could only be done with ceramic materials. The plastic PTFE, best known under the brand name Teflon®, opened up new possibilities which Mr. Pfeiffer was one of the first to recognize. In 1995, SAMSON took over PFEIFFER. which it had closely worked together with over the previous decades, after its founding father retired on grounds of ill health. Today, PFEIFFER as a member of the SAMSON GROUP produces

lined valves as well as a number of other specialized products.

#### PTFE instead of ceramics

On the one hand, ceramics are extremely hard and resistant to acids. But on the other hand, they are highly brittle. The slightest mistake during installation or an unwanted temperature shock could destroy the valves from one second to the next. Mr. Pfeiffer had first encountered ceramic-lined valves in the 1960s while performing valve maintenance work. Mr. Pfeiffer, a qualified metalworker and graduate in business management, discovered a promising niche market, especially if he could offer an alternative to ceramics. He found it in the plastic material polytetrafluoroethylene (PTFE). It is resistant to heat and largely indestructible and, what is more important, it is also resistant to almost all corrosive liquids and solvents. In 1974, Mr. Pfeiffer founded PFEIFFER Chemie-Armaturenbau GmbH in Grefrath-Oedt in the German state of North Rhine-Westphalia and constructed the first valve lined with PTFE.

The young company developed its own method of lining the inside walls of the valves with plastic. The method involved filling small amounts of PTFE powder into the cavity between the valve wall and a special rubber sack to be lightly compacted layer by layer. The compaction is done by experienced members of staff as only the application by hand ensures that the material is distributed evenly. An even, continuous distribution is decisive in creating a homogenous layer (up to 12 mm thick depending on the valve model and its nominal size) during the hot isostatic pressing that follows.

### Ball valve, butterfly valve and actuator

With the Series 20, the world's first PTFE-lined ball valve was developed back in 1975. It still is the only one of its kind available on the market. One year later, the first lined butterfly valve was introduced. The lined butterfly valves available at the time tended to wear out too quickly at the edges, which impaired their tight shut-off. A double-eccentric design dramatically reduced wear on PFEIFFER's first butterfly valve (Series 10). V-ring packings at both ends of the shaft sealed the valve to the atmosphere. As a result, it could also be used in plants where strictest emission requirements had to be met. An upgraded version of the original control and butterfly valve is still one of a kind on the worldwide market. With its butterfly and ball valves, PFEIFFER today figures among the largest suppliers to the

chemical industry as well as other sectors of the process industry.

The problem that gave rise to the first PFEIFFER actuator being built was of logistical not technical nature. PFEIFFER had received an order to equip a new chlorine plant with butterfly valves. Delivery of the actuators was delayed, mixing up the schedule. In 1978, the customer asked PFEIFFER to quickly develop its own actuator. The new Series 30 Pneumatic Rotary Actuator became the first rotary diaphragm actuator for throttling service available on the world market. In many large industrial plants, the upgraded Series 30a is the standard actuator for safety-related applications.

## Sampling valves and pigging equipment

Late into the 1980s, it was still not possible to take residue-free samples



Every incoming component is subjected to 3-D measurements and other material quality inspections.



Three generations of chief executives: founding father Horst Pfeiffer (middle), Lorenz Stolzenberg (left), Marcus Miertz (right)



separate tank, but the tanks were all connected to the same piping system. This meant flushing the pipelines thoroughly every time the color was changed. The obvious remedy was pigging, which means propelling a bullet-shaped tool through a pipeline using gas or water pressure. Similar to a squeegee used to clean windows, the pig scrapes off any residue from the insides of the pipes. Pigging was widely used in the oil and gas sector but largely unheard of in the chemical industry. In the early

1990s, PFEIFFER started develop-

ing a pigging system tailored to the

industry's needs.

presented itself in the paint produc-

tion at a chemical company. In the plant, every color was stored in a

Pigging systems are always comprehensive, turnkey solutions. They include a pig garage with launcher and catcher station, special valves that ensure unhindered passage, switches that move the pig in the right direction, and a control panel. The entire pipeline must be designed so that the pig does not get jammed or damaged, which means uniform inside diameters (also throughout the valves) and no sharp bends or edges. Today, PFEIFFER offers such turnkey systems for pipe sizes between DN 15 and 200, for wide temperature ranges and for different fields of application.

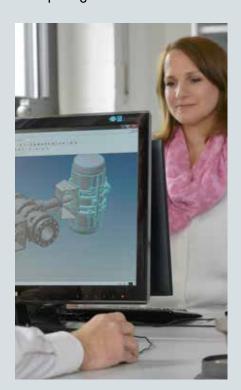
#### **R&D** and production

Right from the beginning, R&D and production formed inseparable units within the newly founded company. If the customer has a problem, PFEIFFER will find and build a solution: this guiding principle of Mr. Pfeiffer is still true today. In orderrelated R&D projects, products for specific tasks are developed. The order-independent R&D department works on creating new products from their own ideas and on continually extending and optimizing the existing portfolio. In their work, the experts at PFEIFFER cooperate with a number of technical universities.

Most of the manufacturing at PFEIFFER is done in-house: from machining the castings to applying and hotpressing the linings to final assembly. Most of the required machinery, tools and fixtures are also engineered and constructed directly at PFEIFFER. As a result, PFEIFFER masters the entire

2014

technology and manufactures under the recognized "Made in Germany" slogan. SAMSON and PFEIFFER ideally complement each other in every way: linear actuators and valve accessories by SAMSON are a perfect fit for the wide range of PFEIFFER valves to form comprehensive control units. SAMSON provides an international sales and service network. How well the company has developed as a member of the SAMSON GROUP is reflected, for example, in the number of staff working at PFEIFFER, which has almost tripled since joining the SAMSON GROUP.



In order-related R&D projects, products for specific tasks are developed – this also applies to individual devices.



The PTFE-lined ball valve is prepared for hot isostatic pressing where the powder is turned into a compact plastic.



# FROM SMALL-SCALE RESEARCH TO REAL-LIFE INSTALLATIONS

Vocational training is a highly rated asset at SAMSON. As a result, it is more than pure coincidence that innovative valve technology by SAMSON helps qualify young people in faraway places for a future career. For example in the northeastern regions of Brazil, where the country's African heart is still beating. The first slaves were deported there by the Portuguese conquerors around the year 1500. This heritage is still vivid in the regional culture, religion, music and food. People pray to the gods of the Afro-Brazilian Candomblé religion or practice Capoeira, a unique mixture of dance, music and martial arts. They eat dried meats, black beans, rice and tapioca flour. And a rhythmic popular tune is always playing somewhere in the background.

This sunniest, yet driest part of Brazil comprises nine federal states: Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte and Sergipe. Around 55 million people live on an area of 1.5 million km<sup>2</sup>. The 3,000-km-long coastline is lined with palm trees and sandy beaches, which give way to fertile farming land as you move deeper into the country. The vast landscapes in the north, however, are arid. This is why Brazil's northeast was long considered the country's poorhouse, its economy mainly sustained by produce like sugar cane and cocoa. Today, the region figures among Brazil's economic powerhouses, recording an annual growth of 3 %. Petrobras, the stateowned petrochemical company, started extracting oil on the coast

and built a refinery in the area. The necessary tanker ships are manufactured for Petrobras in the state of Pernambuco. Additionally, the largest chemical complex of the southern hemisphere was built in the city of Camaçari in Bahia. Large multinationals – among them important customers of SAMSON – settled in the region, which also furthered the tourism industry and helped the local population get jobs and greater prosperity.

To ensure that the future looks just as bright, young people must be educated and trained properly. SENAI, the national service for industrial training, has made it its task to do exactly that: since 1942, the network of non-profit vocational schools has provided professional education at various levels and thus made an

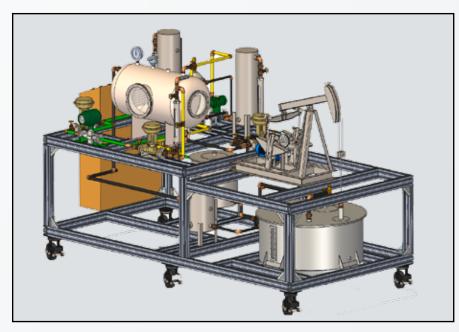


important contribution to Brazil's socioeconomic development. SENAI is the largest training organization in Latin America with 27 regional institutes spread across all federal states of Brazil. Every year, approximately 2.5 million people enroll in the courses offered in 28 industrial fields, including electrical engineering, electronics, metalworking and mechanics. One of the regional institutes is located in Maceió in the state of Alagoas, in a city otherwise known for its fabulous beaches. With Professor Ademir Oliveira at its head, the local center for innovative technology (CITEC) develops pilot plants that simulate real industrial processes on a smaller scale. The first plant built was designed to distil ethanol from sugar. The entire process is simulated on a reduced scale, including the instrumentation and controls, electrical and mechanical installations, process control and quality control of the finished product; even the applicable requirements concerning environmental protection and occupational health are observed. The second pilot plant was developed to show future technicians how threephase separators of crude oil work. All pilot plants are designed in such a way that they can be transported over large distances to remote locations without any problems. When CITEC received various awards at national education and training fairs, other institutes became aware of their successful pilot plants. In response, SENAI Alagoas decided to manufacture the plants in small volumes and transfer the technology to other institutes in Brazil. Mr. Rodrigo Souza, who works at the SAMSON office in Bahia, heard of this project through the head of

the laboratory involved, Mr. Jean Cavalcante.

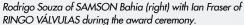
At the time, Mr. Cavalcante was looking for a new control valve that would meet high quality demands, have a compact size and an attractive design. He found a perfect match for these requirements in the SAMSON Type 3510 Micro-flow Valve, which is especially designed for controlling low flow rates in pilot plants and technical research facilities. Even this small valve can be used with Series 3730 Electropneumatic Positioners to communicate via the HART®, FOUNDATION™ fieldbus and Profibus protocols, a feature that convinced the customer and finally won the order for SAMSON. SAMSON signed a contract with SENAI to supply the standard equipment for both pilot plants, each fitted with three or four control valves. So far, the pilot plants have been supplied to 17 other SENAI institutes. Additionally, the plants are to be used at state-run universities to give an insight into industrial processes.

One of the main goals of SAMSON is to train people to become highly skilled staff. This is why a dedicated training workshop was established at the Frankfurt headquarters some 80 years ago. And everyone who has learned to work on a SAMSON valve will surely want to continue using our equipment in the future. The SENAI project in northeastern Brazil also shows how important it is to teach young people more than the theoretical basics and enable them to gain hands-on experience.



Pilot plant developed by SENAI Alagoas to demonstrate the extraction and three-phase separation of crude oil.







The team working at the Bahia office of SAMSON CONTROL LTDA.

To honor his commitment and successful cooperation with the SENAI institute, Mr. Souza of the Bahia office received the SAMSON Award in 2014.

When the contract with SENAL was signed, it also became evident again how important it is to have skilled SAMSON staff nearby. During the project stage, they visited the site several times and taught classes at the Alagoas institute. They did not have to travel far since SAMSON opened a subsidiary in Bahia back in 2003. From there, over 1000 valves have been delivered to Copene Petroquimica do Nordeste, a company now incorporated into the Braskem group that supplies plastics to the Camaçari petrochemical cluster. Many of the production lines operated in Camaçari have since been fitted with SAMSON valves. Assistance and on-site service is provided by Mr. Rodrigo Oliveira, the head of the office, and eight members of staff, who moved into larger facilities with workshop and warehouse located not far from the highway to Camaçari in 2013.

SAMSON's activities in Brazil are headquartered in the megacity of São Paulo. By generating almost 30 % of the country's gross national product, the metropolis is the major center of Brazil's economy. In this area, SAMSON has been delivering products to end users in the process industry, to engineering companies and to OEMs since 1997. The headquarters of SAMSON CONTROL LTDA., where 15 members of staff work under Mr. Rogério Amarello, the head of the subsidiary, also moved into a new building in 2013 in São Paulo's Cotia district. Following the SAMSON motto "Global presence with a local touch", the headquarters are sales office, warehouse, certified service workshop and customer training facility all wrapped into one.

In the neighboring state of Rio de Janeiro, SAMSON's business is focused on the oil and gas sector as the Petrobras oil rigs are moored off Rio's shores. Another important customer in this region is Praxair, a producer of technical gases. Mounted into supply systems, the SAMSON valves are installed all across Latin America, where any valve maintenance and service work is performed by the local SAMSON offices.

Such work is done, for example at the Alberto Pasqualini refinery (Refap), the fifth-largest refinery operated by Petrobras. The refinery is located in the southern state of Rio Grande do Sul. This is where Mr. Souza hauled in the first refinery order for SAMSON Brazil through the general con-

tractor UTC Engenharia – another achievement that won Mr. Souza the 2014 SAMSON Award. As Brazil signed the Kyoto Protocol, Petrobras needs to produce more diesel fuel with a lower sulfur content. To do so, an additional hydrodesulfurization plant had to be constructed on the Refap site. This is where the specialized valve technology supplied by the SAMSON GROUP came into play. Our ability to deliver 200 control valves on time gave us the competitive edge to win the order. SAMSON supplied pneumatic control valves for high pressures and temperatures as well as valves with optimized perforated plugs to handle critical gas flows and ensure that the process runs without any problems.



Rogério Amarello, the head of SAMSON Brazil, with his team working at the São Paulo headquarters.

For off-site transport of the media from the hydrodesulfurization plant to the refinery units, triple eccentric control and shut-off butterfly valves by LEUSCH are used, along with valves for extremely high and low temperatures and high pressures. By the way, technicians from Petrobras and UTC Engenharia are trained in the SENAI courses as well. And probably they have come across a SAMSON valve there already...

View of the Alberto Pasqualini refinery (Refap) located in Rio Grande do Sul.







EXPERIMINTA is the name of a museum located in Frankfurt am Main. As the name suggests, the museum involves hands-on experimenting. And the MINT part points to the areas the experiments are centered around: mathematics, IT, natural sciences and technology – topics also dealt with at SAMSON.

The museum comprises 120 stations where visitors can experiment, explore and experience science and technology first hand. One of the exhibits was developed and made by trainees completing their vocational training at SAMSON. On 22 May 2014, it was officially handed over to the museum.



The SAMSON trainees proudly presented the design and ideas they implemented in their exhibit.



#### **Exploring SAMSON technology**

The exhibit depicts flow control in a water circuit and the tasks valves perform, for example in a heating system. The exhibit is on display at Frankfurt's EXPERIMINTA museum as part of the Wind & Weather section. It was conceived and developed by seven SAMSON trainees, initially as a contribution to the annual My Future competition held by the employers' association of Hesse's metalworking and electrical industry. The team comprised seven trainees in their third and final year of training in different fields, including industrial mechanics, machining, mechanical construction, mechatronics and technical product design. They faced a huge challenge as, contrary to the normal approach, they dealt with a closed control loop and not an individual device. In addition, the exhibit had to be rugged and simple enough for a child to operate and understand. The main components in the closed water circuit developed by the trainees are the control valve and a transparent, illuminated tube. The tube contains small plastic balls moved by the flow of water. Visitors can directly change the valve position using potentiometers. When the valve is opened, the water flows through the valve and causes the plastic balls to move upward in the tube. When the valve is closed, the water flow stops and the balls slide back down to the bottom of the tube. For better clarity, the move-



Visitors of the EXPERIMINTA museum can directly change the valve position in the exhibit, which simulates flow control, using potentiometers.



On 22 May 2014, the SAMSON trainees handed over their exhibit to Mr. Norbert Christl (3<sup>rd</sup> from the right) who serves as vice chairman of the Friend's Association of the museum. They were accompanied by Dr. Kiesbauer, member of the SAMSON AG Executive Board for Research and Development.



SAMSON trainess are actively involved in the annual careers day held for pupils and students.

ment of the plug inside the valve is also shown on a tablet computer: when the valve is opened, the plug, which is connected to the actuator over the plug stem, is moved upward and thus the path is opened for the water to flow through. When the valve is closed, the plug moves down until it rests on the valve seat, causing the flow of water to be shut off completely.

#### It takes hard and soft skills

Working as a team was nothing new for the trainees. Every vocational training program at SAMSON starts with the Exploring SAMSON experience where the "new arrivals" form teams to work on different projects. SAMSON highly rates teamwork of trainees from different fields in other areas as well. For example, they are

actively involved in SAMSON's annual careers day held for pupils and students. They also perform the company tours for groups of students visiting the Frankfurt site throughout the year. In this way, SAMSON furthers the trainees' soft skills, such as communication skills, team spirit, organizational skills, self-motivation as well as their ability to assert themselves and handle criticism. These skills are just as important as the specialized factual knowledge that the trainees accumulate in their respective fields of training.

To learn these job-specific hard skills, SAMSON set up a dedicated training workshop back in 1934. This is where the hands-on training in the technical careers takes place. To gather the necessary knowledge

in practice, all SAMSON trainees go through the different departments at the Frankfurt headquarters. The technical trainees work in the workshops and Production departments, while the trainees who took up a commercial career pass through the offices in Administration and Sales. This is how they learn to support colleagues in their everyday work, deepen their specialized knowledge and become acquainted with the fundamental structures and processes implemented at SAMSON. This last feature is particularly valuable as it prepares them perfectly for a later job at SAMSON.

In Germany, the theoretical part of the training program is mainly taught in vocational schools. Nevertheless, SAMSON does not leave its trainees hanging in the air in this field either. "We provide assistance wherever necessary and sometimes even repeat the topics dealt with in school with our trainees," explains Mr. Hans-Jürgen Strauß who works in the SAMSON training workshop. "I recall one year when the school's teacher for control engineering was on sick leave for a longer period of time. The subject is not only relevant for the exams, it is also fundamental to the trainees' later careers. As a result, we quickly decided to hold control engineering lessons for our trainees ourselves," says Mr. Strauß about the SAMSON approach to vocational training. "We know our trainees and place great importance on them com-



pleting their vocational training successfully." In addition to the classes they must attend in vocational school, SAMSON trainees go to mandatory German and English classes organized by the company.

### Making use of the training at SAMSON

Highly skilled and well-trained staff are the key to success for a company like SAMSON. An enormous degree of expertise is required to handle the highly complex SAMSON products and manufacturing processes. This is why SAMSON takes on around 50 trainees every year in sales, warehousing, technical product design, industrial and process mechanics, machining, toolmaking, mechatronics and electronics. SAMSON is geared towards taking over the trainees as regular employees at the end of their training program and offering them a job to match their skills and inter-

ests. Corporate history shows that this objective is quite often met: many of the workforce trained at SAMSON stay with the company to celebrate their 25 or 40 year work anniversaries. Moreover, a large share of the managerial staff at SAMSON is recruited from the ranks of employees who completed their vocational training at SAMSON. This mutual loyalty has widely disappeared from most other companies. At SAMSON, it is a normal part of everyday business.



The vocational training year always starts with a multi-day trip for the newly arrived trainees.

# INTERVIEW WITH ANDREAS WIDL

In June 2013, Dr. Andreas Widl joined SAMSON as an additional member of the Executive Board and took over as the head of Sales, Marketing and Strategy from Mr. Hans-Erich Grimm after working at his side for four months. Before he came to SAMSON, Andreas Widl, who has a doctoral degree in physics, had held executive positions in various European and US corporations.



You worked for a US company for a long time. In your opinion, what are the biggest differences between American and European companies?

US companies listed on the stock exchange are extremely profit oriented and place great value on achieving their quarterly sales targets. I consider this behavior to be very superficial and short sighted. In my opinion, a company bears much more responsibility than just satisfying shareholders' interests.

#### For example?

Meeting customer demands on a permanent basis, providing a long-term perspective for a loyal and committed workforce, showing social commitment.

#### Why did you decide in favor of SAMSON?

Because SAMSON is unique in the way that it satisfies the interests of the shareholders (i.e. the owners), the workforce (the true asset of every company) and the customers (our employers so to say). SAMSON thinks and acts on a long-term basis. This inspires confidence among our international staff and customers, and lends credibility to the actions of top management and the works council. This is best illustrated by the fact that the children of many SAMSON employees follow in their parents' footsteps and join the company. I definitely experienced quite the opposite during my time in other companies.

## What were your first impressions when you joined SAMSON in June 2013?

I encountered a company that has products with a first-rate reputation, a wide product range and world-wide presence, that serves highly demanding customers and owns a distinct corporate DNA. However, I also experienced a strong competitive spirit between departments within the company that has grown considerably. Sales have doubled every decade over the past forty years without any adaptation of the internal structures and processes to the changed circumstances. As a result, SAMSON runs the risk of underestimating future challenges because of its verifiable success in the past – along the lines: That's how we have always done it.

### Which matters were most important to you during your first months at SAMSON?

To earn the staff's trust and not to create the impression that some smart guy with a doctor title has arrived who knows everything better. Trust is a two-way street, involving give and take. That is why I spent the first months mainly listening to what was being said (or at least trying to) and I asked the same three questions every time: First of all: What makes SAMSON so special? Second: Why do our customers buy from us twice or more often? And the third question: What do we need to improve in the future? Incidentally, the answers were all very similar.

#### Where have you already made a start?

We implemented the newly organized sales division, which Mr. Grimm had started to restructure. To understand SAMSON better, I visited nearly all international subsidiaries and German sales offices and held round-

table discussions with staff there. In most cases, the trips involved visiting customers. It was the moment of truth, so to speak, in which I was told point-blank what our strengths are and what is bothering the customer; the keywords being delivery difficulties. New situations and changed requirements made it necessary to implement management changes in the US, Brazil, Italy, Spain and at two German sales offices. Together with my colleagues on the Executive Board, I am working on new core values for SAMSON and on driving the standardization of processes and digitalization forward. There's definitely no time to get bored here at SAMSON.

Over the past few years, technical sales at SAMSON has transformed from merely taking care of engineering issues to product management geared to the future. How do our customers benefit from this realignment?

Product management is where customer requirements





In a joint effort, SAMSON's management built the house designed by the performance artist Ralf Witthaus. The action underlines the corporate core values at SAMSON in a particularly effective way.

and the solution provided by SAMSON meet, in other words, the interface between product requirements and functional specifications. Product management also acts as the guardian of our product 'menagerie'. More explicitly, it is responsible for ensuring that products are phased out properly at the end of their life cycle and that new competitive products are launched onto the market. Naturally, this is done in close cooperation with R&D. The cost-efficient operation of our valves in production processes is becoming more important for our customers. There is still demand for technical sales and consultation but also for application know-how. All these activities are assigned to the product management departments to achieve a major building block for our future competitive advantage.

## What things are to change at SAMSON under your leadership? Where do you see SAMSON in five years' time?

Unconditional cooperation between all divisions and departments to fulfill customer requirements in a profitable way. That was what SAMSON used to do. It is what made the company successful and great, and that is what we are aiming to achieve again, admittedly even though the world of today has become more complex and increasingly globalized. In five years, our overall added value – from customer acquisition, processing incoming orders, production to successful final acceptance testing and first-rate international customer service – should figure among the most efficient in our sector. Every part of the company and every group member

contributes to the success of the SAMSON GROUP. We have joined forces to tackle and resolve bottlenecks and other challenges, which will always crop up. Young, skilled professionals all around the world regard the SAMSON GROUP as a chance to start a long, international career. My vision also includes us remaining a privately owned medium-sized company that achieves sales of around one thousand million euro at a high profitability.

SAMSON is Europe's number one valve manufacturer. This applies especially to the process engineering sector. What chances do you see of developing SAMSON's position internationally and in other market sectors?

We are currently developing growth strategies for 2020 and beyond for each region, subsidiary and sales office. We want to learn from SAMSON staff in the field which products and services we need to strategically position ourselves in the medium and long-term to win market shares, while remaining profitable of course. We need to join forces to be better than our competitors. Interestingly enough, the products or added value of our customers often follow global trends, which they regularly publish in their business reports. Energy efficiency, water shortage, demographic growth, urbanization, electromobility, an aging society, climate change and IT networking are just a few examples of such trends. An industrial or production process, in which our valves can play a key role, is behind all these global trends. The successful use of our Type 3251 Valve in solar thermal applications or the Type 3241 Valve used in the production of lithium-ion batteries are just a small excerpt from a long list of references and possible applications. I am looking forward to the tremendous amount of work that lies ahead of us.

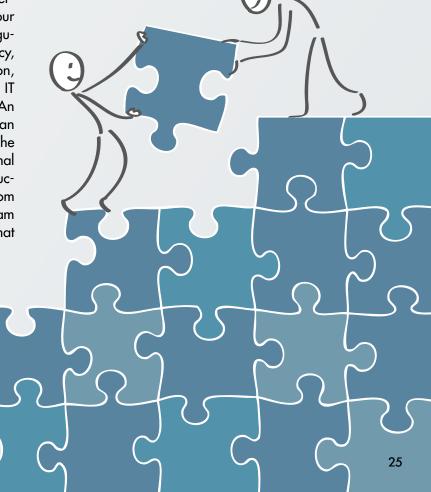
After over a year at SAMSON, would you still decide in favor of SAMSON?

After all that I have experienced here, after seeing the potential for the future and having gotten to know so much international talent: more than ever.

Would you like to tell us your personal motto in life or personal approach to life?

I do not have a particular motto, just a very positive attitude. I apply it to my work, family and hobbies. I believe that success should be celebrated and problems are there to be solved. Ideally, both of them done as part of a team.

Interview conducted by Jürgen van Santen and Monika Schneider, Public Relations and Technical Documentation





# INVESTING IN SUSTAINABLE GROWTH

According to the Annual Report 2014 of the International Monetary Fund (IMF), the development of last year's world economy was moderately positive: "As FY2014 drew to an end, the world economy was gradually turning the corner of the Great Recession. The recovery was gaining momentum and global financial stability was improving." According to IMF, the legacy of the financial crisis was receding, yet the recovery remained too slow and growth was too weak due to different factors to persistently settle down the financial markets. Among advanced economies, the US achieved the strongest growth. Europe's economy stabilized on a modest level with growth rates diverging between the core economies and the stressed countries that had gotten into trouble. Output in emerging market and developing economies grew at a healthy clip of 4.7 %.

At SAMSON, sales have continued to grow at a constant rate since the global economic crisis of 2009. This was also true for the past 2013/2014 fiscal year. Considerable sales increases were recorded in Western

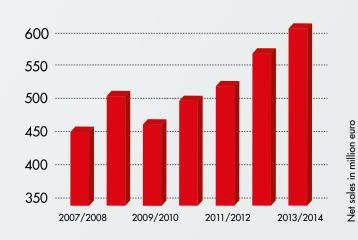
Europe with 7.0 %, in Asia with 10.8 % as well as in the US with an 8.0 % growth. As in previous years, Western Europe remained the region with the highest sales, and Germany again emerged as our strongest national market. In Germany alone, SAMSON generated sales of 145 million euro. The BRIC states comprising Brazil, Russia, India and China contributed 17% to our total sales despite a 12.4 % slump in the Russian project business.

In the 2013/2014 fiscal year, we invested almost 80 million euro in expanding our infrastructure and product portfolio. By acquiring the specialized Spanish valve manufacturer RINGO VÁLVULAS S.L. in Zaragoza, SAMSON opened up new opportunities in the oil and gas business as well as in energy supply. We also expanded our production facilities in Frankfurt, Houston and Lyon. A new service center was opened in the Russian city of Rostov-on-Don. New sales and service facilities were inaugurated in Hungary. We also invested in expanding the production capacities at our SAMSON GROUP companies VETEC and PFEIFFER. All invest-

ments were made with an eye on one goal: creating the best possible benefit for our customers in terms of ontime delivery, quality and local customer service in the different regions and markets we are active in.

Currently, the global economic situation is tight and predictions on its development are hard to make. In October 2014, IMF trimmed its forecast for global economic growth by 0.4 % to 3.3 %. The stagnant euro area, geopolitical crises and a continued investment weakness led to a subdued outlook. Despite these unfavorable prospects for the current and coming financial years, we at SAMSON will continue to follow the path we have taken. We will make further investments within the SAMSON GROUP to improve the efficiency of our operations for the benefit of our customers. Our long corporate history has shown that investments pay off in the long term and produce sustainable, profitable growth.

## 2013/2014 financial year







Mr. Wiesner during the celebrations held to honor the 15<sup>th</sup> anniversary of SAMSON Controls Co. Ltd. in Beijing, China.

#### **SAMSON** is our family

On 19 October 2013, our Chinese subsidiary, SAMSON Controls (China) Co. Ltd., in Beijing celebrated its 15th anniversary. Mr. Zhuan Qi, the head of the subsidiary, had invited all members of staff as well as their families to the celebrations held under the motto "SAMSON is our family". The production facilities and offices in the buildings constructed in 2003 and 2011, which are located in the Beijing Economic Technological Development Area, were open to all visitors. Production, workshops, a warehouse, offices and training facilities share a total area of 14,500 m<sup>2</sup>.

SAMSON China plays a leading role in process engineering and has established close-knit ties with many major companies in the industry.





On behalf of the entire workforce of SAMSON REGELTECHNIEK B.V., Mr. van Adelberg (right) accepted an award honoring the staff's achievements.

#### 40th anniversary of SAMSON in the Netherlands

In April, SAMSON's subsidiary in the Netherlands, SAMSON REGELTECHNIEK B.V., celebrated its 40<sup>th</sup> anniversary. It was one of the first SAMSON representatives opened outside Germany. Mr. Henri J. van Adelberg started business in 1974 with a staff of three. Today, the subsidiary employs 43 people and is one of the leading industrial valve suppliers for the Dutch industry. The strong SAMSON brand as well as thorough dedication to customer satisfaction have contributed to the subsidiary's impressive growth. Finding tailor-made solutions for complex control tasks is what the staff are committed to. Thanks to a dedicated warehouse and



The team working at SAMSON REGELTECHNIEK B.V. in the Netherlands.

workshops, products can be delivered, serviced and repaired at short notice.

During the anniversary celebrations, SAMSON's Chief Executive Officer, Mr. Ludwig Wiesner, honored the achievements of the entire staff. On their behalf, the first head of the subsidiary, Mr. van Adelberg, was awarded the platinum badge of honor of SAMSON AKTIEN-GESELLSCHAFT. Moreover, Mr. Hans Zwart, the current CEO of the subsidiary, received a magnolia tree as a sign of the excellent relations between the Frankfurt headquarters and the Dutch representative.

#### City of Frankfurt awards badge of honor

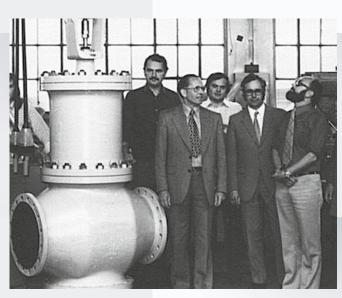


Dr. Nikolaus Hensel Chairman of the SAMSON AKTIENGESELLSCHAFT Supervisory Board

Dr. Nikolaus Hensel, the Chairman of the SAMSON AKTIENGESELLSCHAFT Supervisory Board, has made it his personal mission to give back to the community. His activities extend far beyond SAMSON, he is also dedicated to cultural. educational and social causes. One example of his many projects is a society to support fundamental research in physics at Frankfurt's Goethe University that he founded many

years ago. He also serves as governor of the Friends of Tel Aviv University, as a member of the governing body of the Frankfurt Giersch Foundation, and as chairman of the Alexander Foundation. True to his mission, Dr. Hensel shows his commitment to the community through these and numerous other charitable activities. To honor his achievements, he was awarded the badge of honor of the city of Frankfurt am Main on 10 September. Dr. Hensel received the prize from mayor Peter Feldmann in Frankfurt's Römer city hall in front of his colleagues from the SAMSON executive and supervisory boards.

## FROM **DESIGN ENGINEER** TO **CHAIRMAN OF THE EXECUTIVE BOARD**



Before being appointed to the SAMSON Executive Board, Mr. Wiesner (middle) worked in Production Planning and Preparation.



Dr. Nikolaus Hensel (Chairman of the Supervisory Board), Mr. Ying Tao Zhang (head of SAMSON China) and Mr. Ludwig Wiesner during the groundbreaking ceremony for a new building in Beijing, China.

On 30 June 2014, the Chairman of the Executive Board of SAMSON AKTIENGESELLSCHAFT, Mr. Ludwig Wiesner, retired after working almost 42 years at SAMSON. In a moving ceremony to honor the occasion, Dr. Nikolaus Hensel, the Chairman of the SAMSON Supervisory Board, praised the drive that Mr. Wiesner showed: "Mr. Wiesner was the key contributor who spurred on the international orientation of the SAMSON GROUP and established two successful production sites in China and India. The expansion of the premises and production capacities at the headquarters in Frankfurt bears his mark and will always be associated with his name. Mr. Wiesner has made a very valuable contribution to SAMSON!" concluded Dr. Hensel. In the SAMSON Magazine published in May 2008, Mr. Wiesner highlighted that "tradition, innovation and customer service" were the keys to SAMSON's success.

By focusing on control valve technology as SAMSON's core business, Mr. Wiesner spurred on the internationalization of the company, he set up new subsidiaries across the world and led them to success. Under his leadership, strategically important companies were integrated into the SAMSON GROUP to ensure the continual expansion of corporate know-how and the product portfolio. Additionally, the site in Frankfurt am Main was further strengthened. In an interview with a local newspaper published on 5 October 2013, Mr. Wiesner was quoted as saying that he would not even think about relocating SAMSON until operating a factory at night was prohibited for noise reasons. Landmarks highlighting this attitude are investments worth millions that were made under his chairmanship, such as the expansion of the high-bay warehouse from 13,500 to 23,000 storage slots and the construction of the new production building.



Mr. Wiesner (3<sup>rd</sup> from the left) during the official inauguration of the new production facilities of SAMSON India in Ranjangaon in 2011.



Mr. Wiesner retired on 30 June 2014 after working almost 42 years at SAMSON.

A vita like Mr. Wiesner's, who worked his way up from being an apprentice to steering the company, is outstanding. He started his career at SAMSON on 1 September 1972 as a design engineer. After completing studies at night school, he began studying mechanical engineering at Darmstadt University of Technology in October 1977 and completed his degree at the end of May 1983. That same year, he returned to SAMSON to work as a production engineer in the Production Preparation department. In 1986, he was already designated chief engineer. Two years after joining Production Planning, he was promoted to head of the department in 1988. In recognition of his expertise and unrelenting efforts, Mr. Wiesner received commercial signing powers in 1989 and full signing powers in 1994. In 2003, he was finally appointed member of the executive board to represent SAMSON's Production division. He was responsible for this division for the ten years that followed. Mr. Wiesner succeeded Mr. Gernot Frank in the position as chairman of the Executive Board of SAMSON AKTIEN-GESELLSCHAFT in 2007. Under Mr. Wiesner's leadership, SAMSON mastered the 2009 world economic crisis and has since continued its path of steady growth.

Since 1 July 2014, the members of the Executive Board have been working as a team bearing equal responsibility. The members of the Executive Board are:

**Dr. Jörg Kiesbauer** – Research and Development **Dr. Ingo Koch** – Finance, HR, IT, Materials Management and Legal Affairs

Gerhard Schäfer - Production

Dr. Andreas Widl – Sales, Marketing and Strategy

