

“As a company, we reacted very early to the COVID-19 pandemic, keeping our employees safe while fully maintaining production and service to our customers. The pandemic even accelerated some of the changes we had set in place two years ago, especially with regards to digitalisation, underlying AUMA’s pioneering approach and adaptability.”

By Lucien Joppen



As all training courses had to be cancelled during the lockdown, the AUMA Academy team used the time to create a series of tutorial videos on topics such as actuator selection and commissioning. For more information, see www.youtube.com/user/aumaredaktion.

AUMA: Pushing ahead in challenging times

Jörg Hoffmann, CEO of AUMA, looks back at the first six months of the worldwide medical and financial crisis with some sense of accomplishment. But first, a flashback to the cover story in Valve World from May of 2018. “When we sat down together two years ago, we talked about our strategy to prepare AUMA for the future,” Dr. Hoffmann says. “I said then that this would be an evolution rather than a revolution. AUMA, as a family-owned business has many characteristics that have propelled the company forward and will continue to do so. We have a strong focus on our core business – electric actuators – and long-lasting relationships with our customer base. We stand for reliability, quality, and ‘made in Germany’.”

Full speed ahead

According to Dr. Hoffman and AUMA’s Chief Sales Officer, Ferdinand Dirnhofer, their ‘evolution, not revolution’ approach was already positively impacting the company’s sales in 2018 and 2019. “We performed very well, clearly exceeding our

targets,” Mr. Dirnhofer says. “And this shows that we are on the right path.”

With COVID-19, of course, the narrative changed slightly. Just like most companies, AUMA had to deal with the disruptions caused by the coronavirus. “After discussions with our Chinese colleagues, we realised very quickly that COVID-19 had the potential to go global,” Dr. Hoffmann says. “By the end of February, before many governments sprang into action, we had already assembled a crisis team to prepare for a pandemic. We had two primary goals: to keep all our employees safe and healthy and to continue production while keeping up service to our customers across the globe. Up to now, we have fully achieved both of them.”

Dr. Hoffmann says he is confident that the pandemic can be mastered in due time, even though the impact on business and society may stretch out over the coming decades. “COVID-19 has not prevented us from pursuing our strategic goals to ensure AUMA’s success in the future and to make

the company fit for the rapidly changing requirements of a global economy. On the contrary, we are going full speed ahead with all our activities.”

Market-leading innovation

According to Dr. Hoffmann, this strategy to future-proof AUMA comprises three main fields of action: product innovation, digitalisation, and international localisation. “New product development is an integral part of the evolution of AUMA,” Dr. Hoffmann says. The recent launch of the new PROFOX actuator illustrates this (see text box). “With PROFOX, we have developed an entire new actuator range for smaller torques,” says Mr. Dirnhofer. “PROFOX actuators are small, smart, high-performing and cost-efficient. They will help us increase our share of existing market segments, but also open up applications that have so far been dominated by pneumatic actuators, for example.” Current digitalisation trends hugely influence product innovations. The new PROFOX series, for example, offers various features related to Industrial Internet of Things (IIoT) applications. Another example is the AUMA Cloud, which allows plant operators to gain benefits from log data stored in the actuators (see text box).

“Some of our customers are keen to deploy the latest technologies,” Mr. Dirnhofer says, “so we work with them to develop innovative solutions such as live monitoring, where actuators automatically send data into the AUMA Cloud. That lets users track performance over the lifetime of their actuators, and set up predictive asset management schemes. For other customers, the main concern is reliability and those we address through high-quality, robust actuation solutions. Look at the huge HES Hartel tank terminal in Rotterdam, for example. I’m sure AUMA was chosen to supply 2,700 new actuators because of the customer’s positive experience in previous projects, not only with our products but also with our services, with the people behind the actuators. Our main focus is to listen carefully to our customers. Different customers have different needs, and we make sure we have the products to serve them all.”

Enhancing digital customer services

AUMA is already well underway in its ‘digital transformation’, in both its internal processes and its services to customers. “Specifically for AUMA and the markets we are operating in, digitalisation is getting a boost,” Dr. Hoffmann says. “Of course this is not a new trend, but COVID-19 has acted as an accelerator. It has become clear that digitalisation is not a nice extra but a criti-



Dr. Jörg Hoffmann, Chief Executive Officer (CEO)
Dr. Hoffmann joined AUMA in April 2016. He was appointed CEO and Chair of the Management Board on 1st January 2018 and is responsible for production, R&D, F&C, purchasing, quality management, IT and HR.



Ferdinand Dirnhofer, Chief Sales Officer (CSO)
Mr. Dirnhofer joined AUMA in 1993 and has been Head of International Sales since 2001. He was appointed CSO on 1st January 2018 and is responsible for product management, marketing, and AUMA’s worldwide sales and service network.

cal competence to survive in the modern marketplace.”

At AUMA, COVID-19 has undoubtedly accelerated the development of new digital customer services. In March 2020, AUMA Service added live video support to its service portfolio to help customers maintain failure-free operation of their plants without a service technician having to go on site. This service is available throughout AUMA’s global service network, and customers already see considerable benefits. “One example is the commissioning of new actuators and a SIMA Master Station in a tank farm,” says Mr. Dirnhofer. “Due to travel restrictions, our service expert could not go on-site, so

instead, he guided the local staff via video support through the entire commissioning procedure. The customer was very satisfied with our digital assistance.”

“We expect that COVID-19 will make plant owners more proactively consider preventive or predictive maintenance options, working with component suppliers like us”, Mr. Dirnhofer states. “At AUMA, we already offer maintenance contracts and lifetime asset management programmes. We expect these service programmes to grow, and to influence product design as well. Essentially the target is to increase uptime and allow extended warranty terms. We also have training schemes to help site personnel obtain the



AUMA’s latest investment in manufacturing and testing technology is a fully automated test bench to burst-test the housings of explosion-proof actuators. A robot places the housing parts in a pressure chamber where they are subjected to a pressure of 60 bar.



The HES Hartel Tank Terminal project in the Port of Rotterdam, the Netherlands, illustrates the oil and gas industry's trust in AUMA's proven solutions and services. AUMA is delivering more than 2,700 electric actuators for the project. Photo: HES - Paul Martens

necessary knowledge not just of our products, but also of the hardware and software tools AUMA offers with great success." During the lockdown, the AUMA Academy team members, who usually organise hands-on training courses, have invested their time to create a series of tutorial videos that can now assist customers free of charge. Digital selling has increased, too. An example is the launch of PROFOX. "Initially, we planned this launch at the IFAT trade show in May 2020," explains Mr. Dirnhofer. "As this exhibition was cancelled, we moved the campaign almost entirely online, with a lot of digital content such as 360-degree views and product videos." With series production now well underway, AUMA sales engineers are presenting the new product to customers via video. According to the company, the market response has been positive.

Digital backbone

Another new AUMA service is remote factory acceptance tests (FATs). Before the lockdown, customers usually travelled to AUMA's headquarters in Müllheim, Germany, to witness the final inspection of their actuators in the factory. Because of the travel restrictions, however, AUMA now organises FATs remotely. Ferdinand Dirnhofer explains: "We now live-stream the final inspection so that our customers can witness all the test steps remotely. They very much appreciate this proactive approach." In addition to creating digital customer services, AUMA is also bringing digital transformation to its internal processes. One of the pillars is a new ERP system that will become the digital backbone for all of the company's business processes, including production, supplier logistics, material disposition, order processing, finance and controlling. "This is a huge project that involves all departments within the company. It will allow us

to streamline our processes and serve our customers even better," Dr. Hoffmann says. Implementation is currently well underway, with the first departments already successfully working with the new system.

Smart factory

Digitalisation is also a focus on manufacturing. Striving towards the Factory 4.0 ideal, AUMA is investing heavily in the latest machining technology, robot-aided manufacturing and automated testing. The latest example is a fully automated test bench to burst-test housings for explosion-proof actuators, with a robot placing the housing parts in a pressure chamber where they are subjected to a pressure of 60 bar. "This automated burst testing guarantees workplace safety for our staff with regards to the very high pressures, while our customers benefit from 100 per cent guaranteed quality," Mr. Dirnhofer says.

AUMA's high degree of automation and in-house production has the additional

advantage that each step in manufacturing and testing is fully documented, from individual components to the fully assembled actuator. "We gather a lot of data which is valuable to our customers as it gives them 100 % traceability of their actuators," Dr. Hoffmann explains. "Our vision is to integrate all this data into one system and provide our customers with a 'digital twin' of every product, allowing them to access and analyse this data if needed." As for the company's third main field of action – enhancing international localisation – AUMA is also making good progress, says Mr. Dirnhofer. "The organisation is performing very well. We continue to strengthen our international cooperation, and we have developed localisation strategies for key countries that allow us to perfectly adapt to our local customers' needs." The company also continues to expand its global network by opening new offices, thus moving closer to its customers around the world.

Resisting the pandemic

As the pandemic started to pick up speed, AUMA focused on two priorities: protecting the health of employees and maintaining production, while keeping up service to its customers worldwide. The company quickly put in place hygiene and social distancing measures to lower the risk of infection. In production and assembly, the company adapted working schedules so that staff on different shifts would not meet. For the administrative departments, meeting rooms were turned into additional offices to separate the teams. Also, about one-third of the staff switched to working from home. "Besides many extraordinary measures and restrictions, we also experienced some positive effects. We all learned how to handle online meetings perfectly," says Dr. Hoffmann with a smile. The company also closely monitored its inventory and supply chain, taking preventative action where necessary. Some assembly activities previously performed by suppliers were moved in-house. "It has always been our strategy to invest in our manufacturing capabilities and a high degree of in-house production," says Mr. Dirnhofer. "This strategy has now paid off. We are less dependent on external suppliers, and this has enabled us to maintain production despite the lockdown. Also, the support from our employees worldwide has been tremendous. They have adapted quickly to changing working conditions and reacted in a very responsible manner. It is thanks to their commitment that AUMA managed to stay operational despite the pandemic."

Focus on actuation

Both executives have a positive outlook for the future, even though they agree that challenging times lie ahead for the company and the global economy. "I'm very conscious of the suffering caused by the coronavirus," Dr. Hoffmann says. "The pandemic is by no means over yet. Although at AUMA I believe we took the right actions, I'm sure we have been lucky too. Yet, if we look at the three fields of action we have been talking about – product innovation, digitalisation and international localisation – I am very pleased to say that, despite COVID-19, we have been able to keep on track."

Mr. Dirnhofer adds: "We know where we come from. Our success is built on electric actuators, and this is where we will keep our focus. We see enormous potential for the future, and our actuators will take the next step: onwards into the IIoT."

New PROFOX actuator range

With the PROFOX product range, AUMA has developed a brand-new platform for smaller actuators in the lower torque ranges. These are suited to many industry segments, including modular water treatment skids, cogeneration plants, district heating and cooling, tunnel ventilation, and shipbuilding. PROFOX actuators are designed as a modular platform, including part-turn, multi-turn and linear versions (the latter in development) to suit a wide variety of valve types. Equipped with integral intelligent controls, PROFOX actuators provide enhanced diagnostic features and can accommodate fieldbus, Industrial Ethernet and OPC UA interfaces, making the actuators suitable for IIoT-applications. Variable-speed DC motors ensure fast and precise valve positioning, enabling sophisticated closed-loop control applications.

More information is available at www.profox.auma.com.



AUMA Cloud facilitates predictive maintenance



In 2018, AUMA launched AUMA Cloud as a free and secure cloud-based solution to enable predictive maintenance and cost-effective asset management, based on device- and process-related data. The Cloud is fed with a wide variety of operating data that are automatically logged in AUMA actuators. Thanks to data analysis in the AUMA Cloud, plant operators get detailed information on the loads the actuators and their related valves have experienced over their lifetimes. Companies can plan in maintenance based on actual operating conditions. More information is available at www.aumacloud.com.

A global leader in electric actuation

Founded in 1964, AUMA has successfully developed and produced electric actuators and gearboxes for more than 50 years, offering reliable automation solutions for all valve types and sizes. Headquartered in Müllheim, Germany, the company has grown to become a leading valve automation supplier to the water, energy, oil and gas, and process industries. With 2,600 employees worldwide and a global sales and service network in more than 70 countries, AUMA provides local support all around the world.

