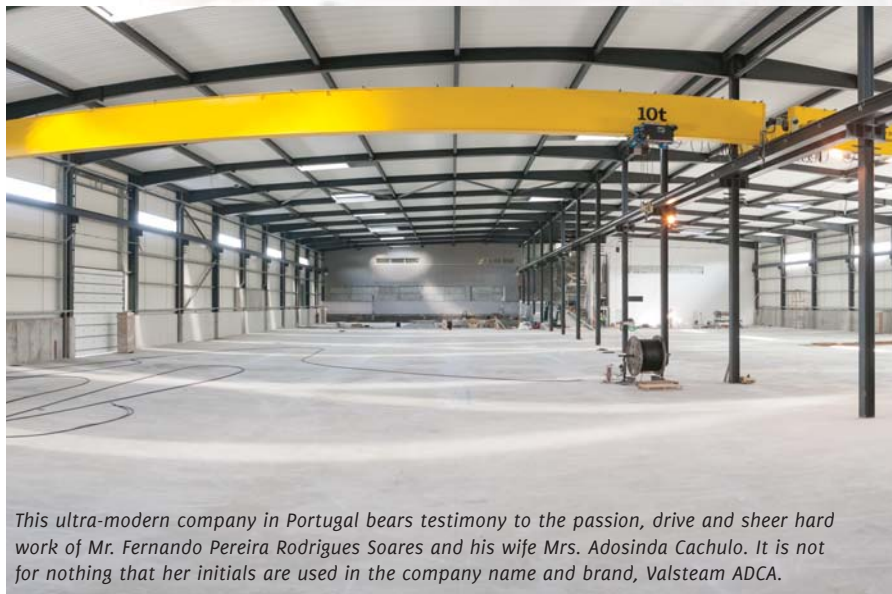


With the construction and nearing completion underway of its brand-new factory, Valsteam is ready for the future. The Portuguese company stresses the importance of in-house manufacturing to guarantee high-quality product solutions to its customers in various process industries. “We also rely on our in-depth knowledge regarding sizing, installation and operating procedures.”

By Lucien Joppen



This ultra-modern company in Portugal bears testimony to the passion, drive and sheer hard work of Mr. Fernando Pereira Rodrigues Soares and his wife Mrs. Adosinda Cachulo. It is not for nothing that her initials are used in the company name and brand, Valsteam ADCA.

Valsteam: ready for the future

Fernando Pereira Rodrigues Soares, founder of Valsteam ADCA Engineering (see box ‘A company by ‘accident’), has kept his word. Several decades ago he said, in his own words, that ‘one day I will build a factory’. This dream came true roughly eight years ago when the first stage was completed. Visiting the impressive manufacturing facilities in Guia, situated between Lisbon and Porto, one can see that the final stage is almost

complete. In February 2020, Valsteam will have an impressive facility, consisting of modern office space, testing facilities and production (both ambient and clean room) and welding/construction in a separate hall across the street.

Mr. Soares says. “There are many manufacturers of pressure reducing valves for steam and compressed air that also offer pressure reducing valves for clean steam and other gases and



The Valsteam ADCA family: two generations growing together



manufacturing industries and so on. Therefore, we are aware of the possibilities and limitations. When we design something new, we always have in mind how it is going to be installed and maintained."

Reflecting on the active involvement of all his children in the company, Mr. Soares says: "In Portugal, we say we work to our luck. I am very lucky to have the entire family on board. My children are fully integrated in the company, sharing the same goals and enthusiasm as the founders. I am a self-taught man. The new generation studied and graduated to continue with the project. Let's be pragmatic and clear, the pace at which we have been developing is not unrelated to the fact that we now have two generations working together at full time."

Company legacy

It is this company legacy which sets Valsteam apart from its competitors, Mr. Soares states. "Many of the traditional companies and brands have been acquired by larger groups and - as a result - have lost their identities. For these larger conglomerates, these companies with a famous heritage are just jewels in the crown. For the companies themselves, being part of a large group doesn't offer many extras in terms of technology development or service efficiency. It is one more brand, one more reference, and one more chance to increase growth that cannot be achieved because there is no longer the brilliance and structure of the golden years."

Mr. Soares also mentions flexibility and adequate response to customer's requests as a distinguishing factor. "Our company name features 'engineering' for a reason. We genuinely do have the knowledge, expertise and facilities in-house to develop tailor-made solutions that will improve our customer's processes. Moreover, as a family business we can take fast decisions which are promptly executed thanks to our streamlined organizational and technical structures. And if needs be we will go home, sleep on an idea and the next day prepare a machine to develop a prototype."

Market segments

Back to the factory. The new facilities are impressive (see box text New expansion plans) but ultimately are means to an end: to accommodate future growth and solidify the company's future. Mr. Soares says: "We have experienced steady but moderate growth. We are not focused on volume, but in producing

industrial liquids. But only a small portion of these valves is actually made by them. The remainder of their business is trading and private labeling. Also, many industrial valve manufacturers offer steel construction equipment, but how many of these actually control the construction, including calculation and welding processes? By contrast we control most aspects of the production and assembly process. This means that at Valsteam ADCA Engineering we can not only guarantee the quality of our products and product configurations but also advise on other aspects that are highly relevant for their use."

Given Mr. Soares' experience as an installer, his company is able to advise customers when it comes down to sizing, process configurations (steam production units

for example), and installing and operating conditions (problem solving, maintenance et cetera).

According to Mr. Soares, the knowledge of steam systems in the industry has deteriorated, partly due to the exodus of the babyboom generation. "This is why our hands-on experience, passed on through me to our employees and my children (all three of Mr. Soares' children have engineering degrees and are working at Valsteam, ed.) is such a valuable asset. I have worked extensively in the assembly of factory equipment: thermal power plants with steam boilers, thermic oil, hot water; compressed air and vacuum plants, networks of industrial fluids to all kinds of

quality products as we want to be a reference in the international market. Obviously, by almost doubling our production capacity, we do expect a significant leap in our business volume which may happen from 2021.”

Speaking of how it serves its markets, Valsteam offers two main product lines. One is directed to industrial steam and fluids in general and the other to clean steam as well as other gases and liquids used mainly in the pharmaceutical industry. “Both market segments are important to us,” Mr. Soares says. “The industrial market represents a significant volume and also offers opportunities for us to design and manufacture skids: plug-and-play units that we assemble and test in-house. This facilitates an easier installation process and minimizes the chance of start-up problems. A few years ago we started developing and promoting consistently the manufacture of skids. It was clear to us that many of the projects sent to us to quote, had been designed by technicians without a sense of reality. Again, here we can make a difference because of our intricate knowledge of real-life process conditions.”

Buoyant market prospects

The market for ADCAPure is even more interesting for Valsteam as the competition is less fierce, the products are higher-margin and market prospects are favourable, according to Mr. Soares. “Take for example the pharmaceutical market in China. As Western medicine is becoming more accepted by Chinese consumers, the demand for and subsequent production of pharmaceuticals will soar in this region. We are also planning to extend our ADCAPure-range with new products. Our production facility features a clean room production, testing and packaging facility which enables us to guarantee high-quality products.”

New expansion plans: logistics and warehousing

Valsteam ADCA Engineering has engaged in production since the late 1990s. Due to the company’s growth and its in-house production philosophy, it needed sufficient ‘breathing room’, hence the plans to build a brand-new production complex. Mr. Soares: “In 2011, we had rented four industrial warehouses. Although we had space to work, it was a temporary solution and sometimes we had to resort to improvisation. In the same year, we laid the foundation stone of what would be our first factory specifically designed for our needs. Since we didn’t want to rely on external financing, we had to build it in stages.” From the total production and office space of 40,000m², around 10,000m² were built in the first 8 years, divided in three stages, not considering a new and modern test bench. In 2019, the fourth stage was started aiming to double the total manufacturing area to 21,000m². “We are now working at a new expansion project, which will be a warehousing and logistics center with an area of approximately 4,000m².”

Valsteam’s plant features state-of-the-art equipment, which demonstrates Valsteam’s determination to invest in the best and fastest production methods as well as its policy to manufacture 100% in-house. Sample equipment includes top of the range 3 to 7 axial CNC machines and the latest technology in dimensions controls, full automatic ultrasonic cleaning machines, new test benches, automatic storages with stock control, and two certified clean rooms, where the company’s ADCAPure range is assembled. Moreover, Valsteam continues to invest in automation and robotics to further optimize its manufacturing capacity.

Talking about geographical markets, the EU is for now by far the most important hunting ground for Valsteam. According to Mr. Soares, his company still has sufficient room for growth on the continent. Valsteam, working almost exclusively with distributors, is present in more than 80 markets and as such a global company.

Yet, Mr. Soares remains level-headed. “It’s true that by nature we work on the global market, but in certain regions it’s difficult if local production is absent and for now, we don’t consider it. Let’s say that future growth must be evenly distributed between the European Union and the rest of the world.”



A company by ‘accident’

In 1983, Mr. Fernando Rodrigues Soares established Eurofluido, dedicated to the construction and assembly of heat exchangers, condensate vessels, humidity separators, flash vessels, sample coolers, et cetera. At the same time, he was also representing an Italian manufacturer of steam traps, pressure reducing valves and control valves; in short, a complete range focused mainly on steam and condensate systems. These products were required for his installation activities.

When the Italian manufacturer was acquired by another company, Eurofluido lost its access to the aforementioned product range.

“Since these products were incorporated in our projects and installations, they were of major importance to us. As we couldn’t find another brand with a similar range to represent in the Portuguese market, I decided to create my own.”

In 1994, Valsteam ADCA’s-brand saw the light and Eurofluido entered new territories by designing and manufacturing steam traps and valves for steam and condensate systems.

Finally, in 1998 the most risky and crucial decision was taken. The family decided to move away from its activity as a pipeline installer - its core activity then - and dedicate themselves exclusively on the production of valves, steam traps and other steam-related equipment.

Valsteam ADCA Engineering S.A. was then created, taking over the manufacturing and distribution of such equipment.

**NEW
PRODUCT**

Product news from Valsteam

New generation of float and thermostatic steam traps

From June 2020 onwards Valsteam will roll out a new generation of float traps covering all sizes from DN15 up to DN50.

The new design delivers flexibility and functionality. The single connection between body and mechanism allows a much easier change of flow direction (vertical, left to right and vice-versa) with few steps: rotating mechanism and cover to desired position and replacing two gaskets along the way, without requiring any additional machining procedure.

The robust bimetallic air eliminator is prepared for low and high differential pressure conditions with the plug stem in the vertical position, with lower friction and consequently superior performance.

All models will be available with the same features and prepared for all the options: SLR (Steam lock release), HVV (Hand Vent Valve), BDV (Blowdown Valve), AFZ (Anti-freeze Valve), FLL (Float Lifting Lever) and (AV) air vent.



P173L - Reducing costs with in-line design



It is still a common practice to install angle type pressure regulators for clean steam, demanding significant and costly changes to the pipe design. The P173 solves the issue with its in-line design, while still being self-drainable. The bottom drain connection allows for the condensate to drain completely during start-up and operation, independently if there is consumption or not. The two available direct gauge connections allow monitorization of upstream and downstream pressures with no need for additional welding procedures to the pipeline. The new P173L will launch this year and features smaller Kvs, completing the P173 offering of in-line pressure regulators. Manufactured in 316L with BPE, DIN and ISO connections.

Blowdown valve VPA26/2- Simple and efficient

“This year we’ll introduce important developments to our control valve range of products,” Mr. Soares says. “Although the first novelty is a specialty valve, an intermittent bottom blowdown valve for boilers and a successor to the VPA26S, we are also working hard to release a new high-performance, general application globe control valve and a new range of pneumatic diaphragm actuators.”

The VPA26/2 will then be available with EN or ANSI flanged connections in carbon steel and stainless steel. The compact diaphragm actuator will be offered in a pressurized water

actuated version as well as the standard pneumatic version.

The valve features clamped-in seats instead of the traditional screwed-in seat system, allowing complete body disassembly by removal of the bonnet bolts which facilitates in-line maintenance without special tools. The valve packing is a completely redesigned spring-loaded PTFE/GR V-Ring unit, withstanding up to 250°C and requiring no re-tightening during service.

Another important feature of the valve is the oscillating plug, improving sealing throughout the valve’s lifetime. Plug and seat are manufactured from



hardened steel, reducing wear/tear damage caused by sludges and high velocity flow.

Pilot operated PRV57 - Compact and reliable



The PRV57 is the company’s new take on a pilot operated pressure regulator for steam and gases. Manufactured in cast carbon steel or stainless steel up to DN100 and NPS4”, the valve allows for simple interchangeability between internal or external sensing lines by changing a bushing or plug. The main valve plug and seat can be easily inspected and replaced without disassembling the valve, simplifying maintenance and reducing downtime.

The new main valve stem, piston and pilot valve guiding systems have been rigorously field-tested in several applications for over a year, proving successful even when poor steam quality is present which is always a challenge for any pilot operated regulator. PRV57 options include: drain connection on the body for steam trapping; compressed air top for remote control or low hysteresis/droop; low pressure top for applications where downstream set pressures are below 0.5 bar.