

Valve World

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Cover Story:

Empowered performance from OMAL

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OMAL S.p.A. celebrates its 40th anniversary in 2021. During these four decades, the company has steadily expanded its product portfolio and geographical reach. OMAL states that it delivers 'empowered performance' to its customers. "We are renowned for product solutions that are characterized by superior quality - Made in Italy - and performance to be used in complex and challenging applications", the company states.

By Lucien Joppen



Empowered performance from OMAL

Valve World travelled to OMAL's headquarters in North Italy to interview several employees on various aspects of its business. When arriving at the main building in Rodengo-Saiano, the first impression is positive. OMAL's office building and manufacturing and storage facilities are surrounded by lush green lawns and trees. When we entered the premises, it became apparent that the company takes its responsibility to ensure a safe visit: our temperatures were taken and COVID-19 checks (Green pass) were checked.

After the above formalities, we sat down to talk to Mattia Bocchi (Communication Manager), Giovanni Coombs (Area Manager North America), Luca Chiantore (Area Manager Asia) and Chiara Speltoni (Sales Department) about what makes OMAL so special. But first, a brief retrospect of the company.

In 1981, Mr Agostino Bonomi founded OMAL S.p.A in the city of Polaveno in Val Trompia (province of Brescia, Italy). The founder belonged to a family of far-sighted and successful entrepreneurs with diversified activities mainly in the production of



Company timeline

- 1981**
Establishment of the company in Polaveno (BS) Italy to manufacture scotch yoke actuators
- 1987**
Transfer of headquarters: with the increase of the workforce and production volume, OMAL moves to Villa Carcina, Val Trompia
- 1992**
ISO9001 Certification:
OMAL, one of the first companies in its field in Brescia, implements and obtains the certification for its Quality Management System, according to ISO 9001 standard (certificate n. 0041/7 of the 14/07/1992)
- 2000**
OMAL launches its pneumatic angle-seat valve
- 2006**
Launch of OMAL's butterfly valve
- 2008**
OMAL opens new production facility (10.000 sqm.) in Rodengo Saiano (BS)
Company launches its floating ball valve
- 2012**
ISO 14001 Certification
OMAL introduces trunnion-mounted ball valves and heavy-duty pneumatic actuators.
OMAL implements and obtains the certification for its Environmental Management System for the Rodengo Saiano plant, according to ISO 14001 standard (certificate of the 23/01/2012).
- 2015**
Amedeo Bonomi becomes the CEO and leader of the industrial operations of OMAL
- 2016**
New manufacturing plant in Passirano (BS), a new warehouse and new offices for the valve and actuator design and production departments. The company's workforce total passes the 100-mark
- 2017**
OMAL extends the certification for its Environmental Management System to the Passirano-plant, according to ISO 14001 standard and obtains the B Corp certification.
- 2018**
OMAL renews its web image, launching a new official website, a dedicated APP for products and offers and presenting a new institutional video
- 2020**
OMAL USA Corp, a subsidiary of the OMAL group, is finally operative in the Cincinnati-area to consolidate its presence in the territory and assist all of its customers in the USA
- 2021**
OMAL celebrates its 40th anniversary.
The company becomes a Società Benefit

industrial valves. His vision was that growth of this sector would be mainly attributed to the implementation, research and development in the field of process automation.

Complex and challenging solutions

Thanks to this vision, OMAL grew into a company in which "close-knit teams of specialized technicians and engineers have succeeded in developing innovative products in various (inter)national industry sectors. Our teams have also developed the capability to respond effectively to the increasingly numerous and complex technical requirements of our customers. Our credo is: if it is simple, anybody can do it. If it is complex, there are not many."

Talking about products, OMAL Group has divided its product gamma over two compa-

nies: OMAL and Actuotech. The first company offers a variety of valve types (ball, butterfly, angle-seat, high-pressure), whereas its 'sister company' Actuotech develops and manufactures pneumatic and electric actuators both for OMAL and third-parties. The company also manufactures heavy-duty actuators in various sizes, usually very large dimensions.

"We excel in product solutions, such as automated coaxial valves and angle-seat valves, in which we integrate our valve and actuation expertise. These integrated solutions have countless advantages over any traditional process automation solution."

Stand out applications

Thanks to the wide range of its products -valves to actuators - and the high-perfor-

mance of its components, OMAL operates in all industrial and process automation sectors. “There are applications where our valves shine and stand out from the competition”, the company states.

“First of all, in gas generation. Pneumatic valves, ball valves and actuators are widely used in the production of industrial gases, including nitrogen and oxygen. Because of COVID-19, oxygen production has become a fast growing sector. Our unique VIP coaxial valves have allowed the production of many oxygen generators for hospitals and industries during the height of the pandemic.”

Another industrial application is air distribution for industrial facilities.

Valves in unison with actuators perform multiple functions in compressed air lines, from air routing to plant partialisation to safety operations. “Special OMAL pneumatic valves allow these functions to be performed in an integrated manner in a single device with advantages in terms of space, air consumption and operating cost.”

Also in the production and storage/distribution facilities, OMAL is present with its high- and low-pressure ball valves/actuators that are essential components of gas plants and their distribution networks.



Made in Italy

As stated in the introduction to this article, OMAL prides itself on quality and the Made in Italy-approach. The company’s heritage is intertwined with the industrial past and present of this region. The area around Milan is well-known for valve manufacturers, steel (parts) production and machining companies. As such, OMAL is located in the ‘valve valley’ of Italia, benefiting from the local knowledge and supply base for its product gamma.

“We ensure the quality of our products on various levels”, OMAL states. “First, the quality of our materials that we mostly source from our Italian suppliers. This quality is crucial for the final quality of our products. If a tiny part fails, then the product itself is compromised, hence our focus on material quality. The selection of the materials with which it produces its valves and actuators covers a fundamental role in maintaining high levels of performance and reliability.”

Getting the best out of every component

OMAL predominantly uses aluminum, brass and steel alloys for its products. The company also uses an impressive array of CNC-equipment to machine incoming parts with a precision and speed that can’t be matched by manual machining.

OMAL mainly uses CNC-machines from an Italian supplier. Due to a special agreement with this company, the company gets a ‘front-row seat’ when he has made any recent equipment upgrades. “That’s how we stay ahead of the competition in terms of maintaining production quality and efficiency”, OMAL says.

OMAL also has invested in a plastic molding machine. The company has developed a plastic O-ring for one of its products to replace a metal O-ring with the aim to reduce friction.

“Although we only use two types of these O-rings, which are made of a special, custom-made polymer, we chose to manufacture these ourselves as we want to get the best of every single component and increase the quality level of the entire product configuration.”

Naturally, there is also a human aspect behind quality, which is sometimes forgotten in a heavily automated sector. OMAL states that its staff is an important factor and that it stimulates continual learning (knowledge, skill sets) to allow for a synchronistic development of the company and its work force.

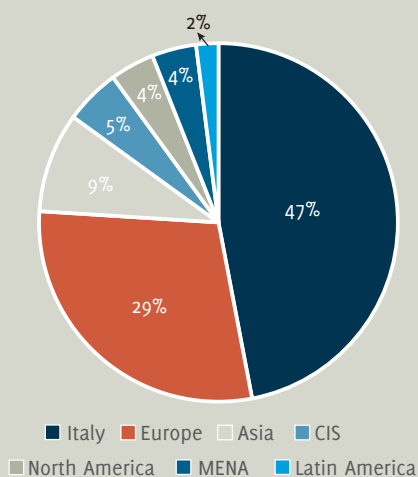
Solid base

As the company timeline on page 19 proves, OMAL has had a quality management system in place since 1992. “The adoption of a quality system is a strategic decision that has improved and still is improving our performance. It also constitutes a solid base for sustainable development initiatives, which will be discussed later”, the company states. OMAL has been certified, first with the 2001 ISO standard and later, the 2008 version of the standard UNI EN ISO 9001 and, from 2017 onward with the 2015 version of UNI EN ISO 9001.

“Quality is the result of the correct management of risks considered to go beyond the perimeter of the product or service offered. OMAL firmly believes that there is no quality if one is not able to offer its clients a product or service which conforms to the best international standards.”

OMAL also has extensive testing facilities (pressure testing etc.) to ensure that its products go out with the expected product quality. Like any other company, OMAL receives claims which its quality department duly investigates. “We need to get to the root of the problem to assess whether it is

OMAL’s global presence



OMAL has acquired strong positions in the European market. As the pie chart shows, the domestic market is very important. The same accounts for Germany, mainly driven by the chemical sector.

The company states that the Chinese market has been on the rise in the last couple of years. The same accounts for the American market, a development which is likely to continue with the opening in 2020 of a brand-new branch office in Erlanger, Kentucky. This facility harbors sales, accounting and logistics departments and a stock of more than 5,000 actuators and coaxial valves, ready for delivery.



the product or whether there are other, product-external causes. By doing so, we strive to continually improve our quality, whether it is product or process-related.”

Reducing environmental impact

Besides priding itself on its products and services, OMAL also focusses on doing business in a sustainable manner. “From the early beginnings, we have incorporated sustainability, guiding our way of doing business and creating value for our stakeholders”, OMAL states.

“Our aspiration is to increasingly and gradually integrate sustainability into everyone’s daily actions to obtain consistent operations in line with the most virtuous companies in the field of corporate social responsibility.” OMAL says that it is already reducing the environmental impacts generated by production activities to prevent pollution of the area in which it operates and that resulting from the use and disposal of its products. OMAL is

also certified according to the most important and advanced Italian and international social, ethical and environmental standards.

Pioneers

In its effort to continually improve its standards, OMAL became a ‘Società Benefit’ in 2021. In 2016, Italy became the first European state and the second country in the world to create a new legal status for companies, called Società Benefit. Companies that achieve this status, ‘combine the goal of profit with the purpose of creating a positive impact for society and the environment and which operates in a transparent, responsible and sustainable way.’

“Being a Società Benefit allows us and our employees, to be part of a network of companies that is pioneering a change in the very concept of business, restoring value to humanity and the environment by developing markets and exhibiting those set to be the best and most profitable companies of the future.”

Energy savings

The above might sound abstract. However, on a more mundane level, in terms of product development, it means that OMAL strives to reduce the environmental impact of its products and increase worker safety, both through product characteristics and production methodology.

Specifically for its actuators, OMAL has prioritized certain product characteristics such (the reduction of) air quantity and therefore of energy.

“Thanks to the scotch yoke, we can ensure an important energy saving compared to other equivalent systems: up to 40 per cent less consumed air with a weight/ maximum torque ratio equalling minus 30 per cent Kg/ Nm. Another fundamental energy saver is the correct dimensioning of the actuator, which we can ensure because we can design and deliver the entire unit.”

End of life

Reliability and durability are factors that apply both for actuators and valves. The company states that a longer life span is not only more cost-friendly for end users but also reduces waste throughout the supply chain and improves the CO₂ footprint of its equipment “We work on technical solutions to reduce the deterioration of moving parts to improve product functionality, reduce the torque and subsequently reduce the energy needed for activation and guarantee the maintainability of the product”, the company says.

Finally, end of life is a crucial driver in OMAL’s product development. The company states that it designs products in such a way that they can be completely dismantled, separating the different materials for correct disposal. The company instructs its clients by providing a blue print listing all materials and the way these should be disposed.

“Our drive to make the world a more sustainable place stretches out across throughout our supply chain, both for our suppliers and our clients. OMAL doesn’t stand by itself but is part of an industry and a society.”

Product news

2021 has proven to be a very busy year for OMAL regarding product development. The company launched three product innovations, namely VIP EVO, KRATOS and RACKON. With VIP EVO, OMAL has combined the valve and actuator function a smaller device with a volume up to 75 per cent less than that normally required for a standard unit. “It is a high-performance unit that realizes considerable air savings. All this and much more allows VIP EVO to last up to 10 times longer than the other highest performing automated ball valves”, the company claims.

The KRATOS ball valve is designed to handle pressures of up to 413 bar (6000 psi). “With the flexibility to fully automate and being 100 per cent manufactured in Italy under strict quality procedures, KRATOS is the ultimate solution for your high-cycle applications.”

RACKON is OMAL’s latest rack&pinion pneumatic actuator, available in double acting and spring return versions. The product, also Made in Italy, is designed by Italdesign Giugiaro, a renowned Italian design studio. “Besides looking stunning, it is high-performance actuator, facilitating high configuration ranges that allow flexibility and torque precision generated by the springs.”

