

## CEO Peter Hägg has the floor

The story begins in 1945 with my grandfather Sven-Ragnar who after the war saw a business opportunity in producing cutlery. It was a scarce commodity and a friend of his had mentioned this to him. He was always an inventor at heart, so one thing led to another and within a few years the focus had shifted to subcontracting for the neighboring industries.

As fate would have it, Billman Regulatorer needed a valve they could sell on a "You make it, we sell it"-basis. This was the company's way in to the valve business.

Peter and Lars

#### LOVING "THE DEAL"

My father Ulf who was a businessman through and through joined Somas very early on and handled bookkeeping on the side. He absolutely loved making deals, selling, buying, discussing, and coming to agreements. In 1964 my grandfather unexpectedly passed away, and from one day to another my parents had to make a descion. Should they move to Säffle and uproot the life they had just started in Norrahammar outside of Jönköping. I think the initial plan was to give Säffle a try for a year, but looking back they obviously decided to stick around a lot longer than that. At this point in time Somas was an established business consisting of about 5 people working out of a basement. Dad handled the office and sales while his business partner and friend Folke handled production. I think the main driving force back then was to run your own business and seeing it grow and succeed.

### MANAGING A BUSINESS AND EXPECTATIONS

There were never any expectations from my father that me or my brothers would work at the company. I studied economics in Karlstad and moved to Stockholm. My little brother Lars, who had previously been a part of the business, chose to pursue a career as a musician.

After a few years in Stockholm I came back home to Säffle and started what I can best describe as a trainee-program. I got to shadow different employees at Somas and learned a great deal as a result. Somas was my father's lifeblood,

but when his business partner Folke passed away
I imagine he felt lonely. He definitely expected
things from his employees. The main one
being that everyone should always strive
to do the best work they could.

### FINDING ONE'S PASSION

Within a few years all three of us bro-

thers were involved in the business, and one day we sat down and discussed wether we legitimately belived that we could pool our resources together and keep Somas going. It's never guaranteed that working together and keeping things professional works out. Luckily for us it did, and since 1995 I have been the CEO with my brothers as my closest co-workers. If my father's passion was "the deal", I'd say mine is to "build and maintain". I enjoy structuring things and building a team. We would never have made it to where we are

today without our skillfull and involved employees

- Peter Hägg





### Passion for valves

As a global innovator, Somas has both the experience and passion to solve the most complex challenges in the field. We combine advanced technologies, industry-leading experience, and an insatiable curiosity for the world around us to create sustainable solutions for our customers.

#### PASSION AND CURIOSITY

The "how" of Somas is complex, but the "why" is simple and has been a part of our company since its inception in 1945. We carry out our work with passion and a large dose of curiosity. We constantly strive to meet the needs of today without negatively impacting future generations' abilities to do the same. Our solutions are based on three core concepts: Sustainability, security, and innovation.

We believe that the difficult and complex should be simple, both now and in the future. With our passion for valves and their business areas, we are confident that we can do what we can to ensure that you as our customer will feel safe using our solutions and services.



### SUSTAINABILITY

- Sustainable production
- Purification systems for exhaust gasses
- Recycling of scrap



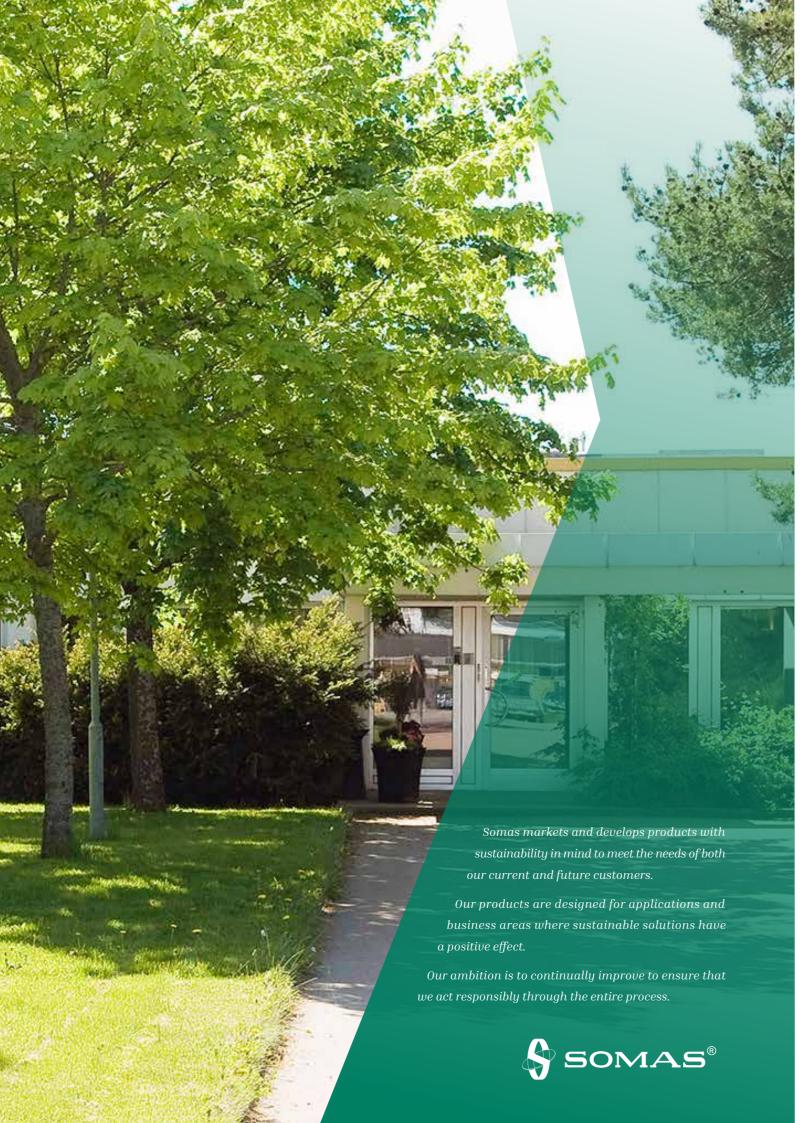
### SECURITY

- Recycling of scrap
- Functionality
- Ease of use



### INNOVATION

- Leading development
- Environmentally friendly technology
- Digitalization





### Sustainability

For Somas, sustainability, security, and continuity are central factors – they are a natural part of our customer relations and our business. We want to be a responsible and profitable actor in a long-term and sustainable society. Our values and policies, our code of conduct, and our business management system serve as the foundation for Somas' results. The key is to meet the needs and demands of today without compromising future generations' abilities to do the same.

### UN GLOBAL COMPACT

Since January 2020, Somas Instrument AB has supported the UN Global Compact. Within this initiative we support and actively work with their principles within the areas of human rights, employee rights, environmental work, and anti-corruption.

### SUSTAINABLE DEVELOPMENT

Sustainability is built on the balance between the natural environment, the work/social environment, and economics. Sustainable development is development that meets the needs and requirements of today as well as the future. Society as a whole needs to adjust to sustainable development and production. We are not there yet, but Somas wants to help within the framework of our business.

### **FACTS**

- Somas strives to run and develop our business in a sustainable and responsible way
- A good balance between our financial, environmental, and social responsibilities is required for a sustainable business model with our end-users
- Somas has sustainability in mind throughout our entire business, and we expect our partners to do the same



### Somas and ISO certificates

Within Somas' business management system, the company's overall goals and strategies are converted into processes focused on the needs of the business itself and its customers. The business management system serves to provide an overview of how our company fulfills its mission while also showing how each employee contributes. At Somas, quality awareness is a natural part of our daily work, and all employees are actively involved.

There are a number of international requirements and standards that serve as the basis for certification of a business management system. Somas has chosen to comply with standards focused on quality (ISO 9001), environmental work (ISO 14001), and work environment (ISO 45001).

### CERTIFICATES

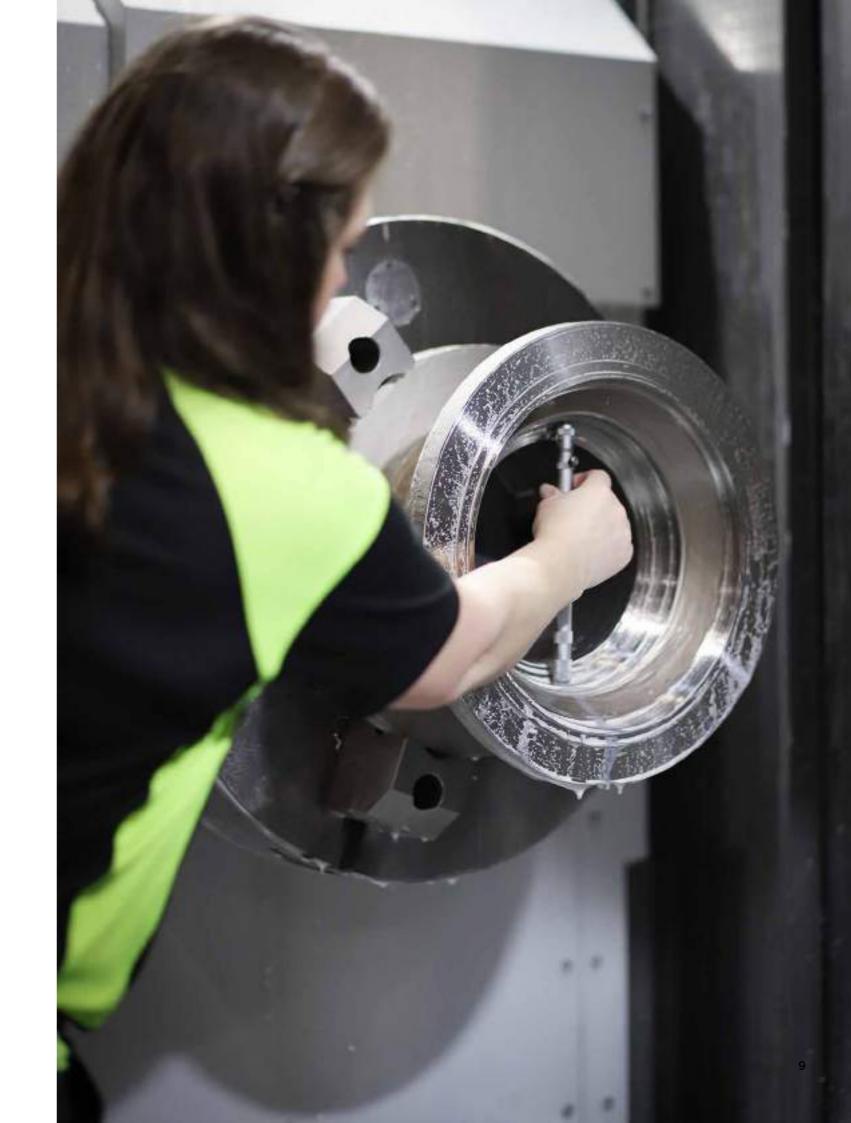
Somas is certified in accordance with:

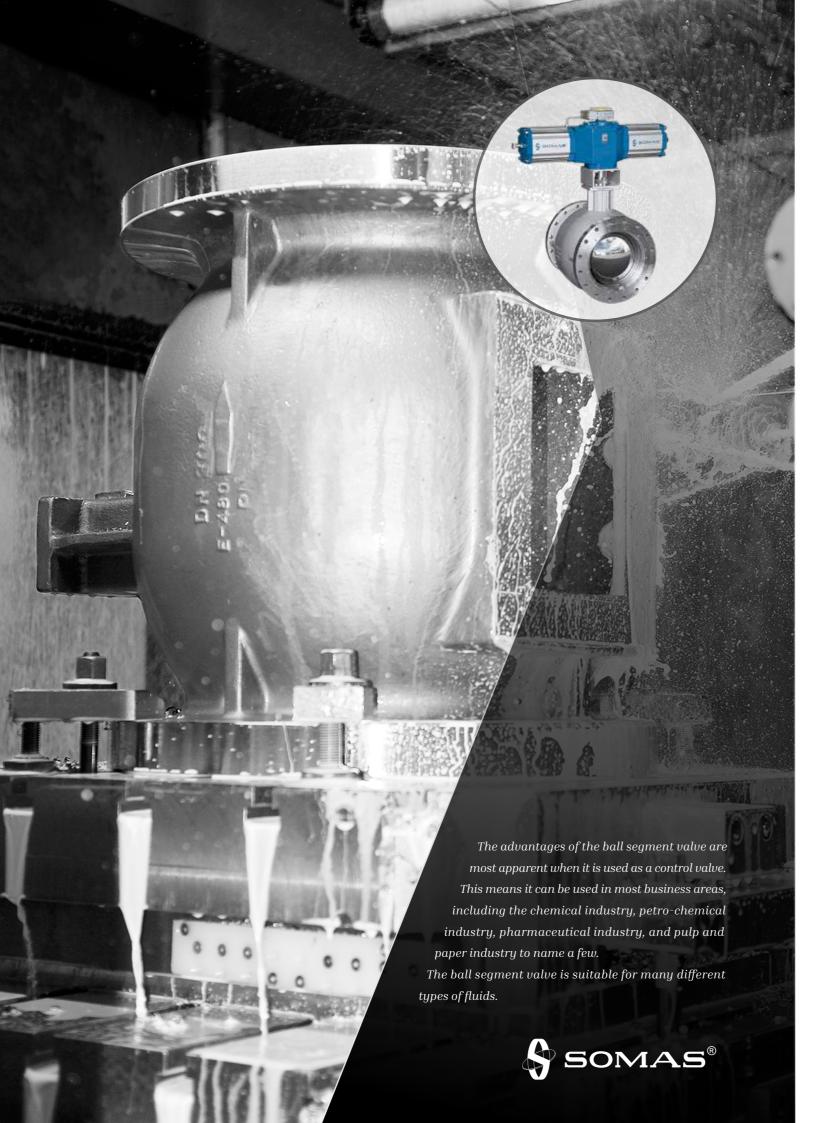
- ISO 9001:2015
- ISO 14001:2015
- ISO 45001:2018
- PED 2014/68/EU Approved in accordance with Module H

### TYPE APPROVALS

Somas' products can be supplied with or in accordance with:

- Equipment intended for use in explosive environments approved in accordance with ATEX directive 2014/34/EU.
- 2006/42/EC directive for valves seen as partially or fully complete machines
- Fire-safe certified in accordance with ISO 10497/API 607
- REACH
- Other approvals that can be obtained/provided upon request





# High capacity in control applications

High capacity, good tightness, and free flow. These words represent some of the many advantages of our ball segment valves. Somas ball segment valves are designed to handle the requirements for control valves established by the process industry. Thanks to its free flow and alternative materials available for both the valve body and seat, the ball segment valve is often the best solution.

### DESIGN

The high capacity of the ball segment valve comes from the design of its seat and ball segment. Compared to other valve types, it is often possible to choose smaller, more cost-efficient sizes. What sets Somas ball segment valves apart from other manufacturers is the fact that the entire valve is designed with free flow in mind. This consideration minimizes the risk of the valve clogging.



#### **EXCELLENT FLOW CHARACTERISTICS**

The ball segment valve is most commonly used as a control valve due to its linear control curve. The properties of the valve make it suitable for most applications. Combined with Somas pneumatic actuators and valve positioners, a flexible unit with a wide control range is created.

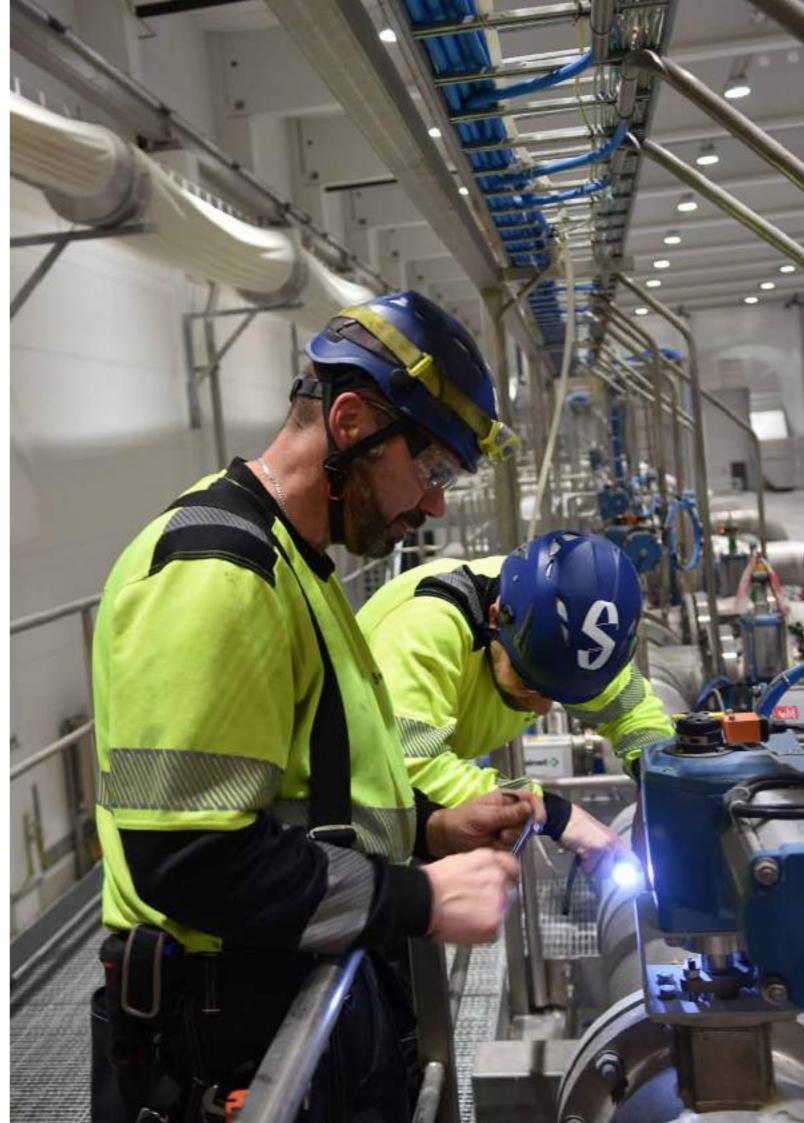
### **PRODUCT INFORMATION**

- Sizes from DN 25/2 to DN 600
- Pressure classes: PN 10 PN 40, Class 150 300
- Ball segment and shaft constructed as one piece.

  This results in backlash-free operation and accurate control.
- Different face-to-face dimensions available
- Can handle high drops in pressure
- Good tightness up to class IV-S1 (standard) for valves with metal seats and class V (standard) for soft-seal seats
- Excellent control characteristics

# Ball segment valves





# Somas butterfly valves can be found in hundreds of thousands of different installations for many different applications. Based on our many years of experience constructing and manufacturing metalseated butterfly values, we can confidently say that our concept is the best on the market. This concept also serves as the foundation for our continued work with improving our butterfly values. \$ SOMAS

# Advanced triple eccentric design

Somas butterfly valves help you control your flow, regardless of if its steam, gas, water, or other fluids. The valves are made from stainless steel with a homogenous metal seat. The valves are supplied with fitting between flanges in mind, both with and without lugs or in a double flanged design.

#### DESIGN

There are several types of Somas butterfly valves, all of which offer our unique triple eccentric design. The design of the seat and disc results in excellent tightness and eliminates the need for maintenance.

A high surface pressure between the seat and disc makes the valve usable in pulp applications where fibers are easily cut. The MTV-type butterfly valve is the most cost-effective choice for control and on/off-applications.

Our design makes it possible to select from a wide range of materials during manufacturing. This increases the potential uses of the valve significantly. The metal seat ensures that high flow velocity does not affect the valve's ability to close, and it can be used for many years.

#### COMBINE WITH AN ACTUATOR

The butterfly valve is suitable for both pure and contaminated media such as liquids, gasses, and steam. For control applications the valve is equipped with a Somas pneumatical actuator and valve positioner. For manual use the valve is equipped with a lever or gear unit.

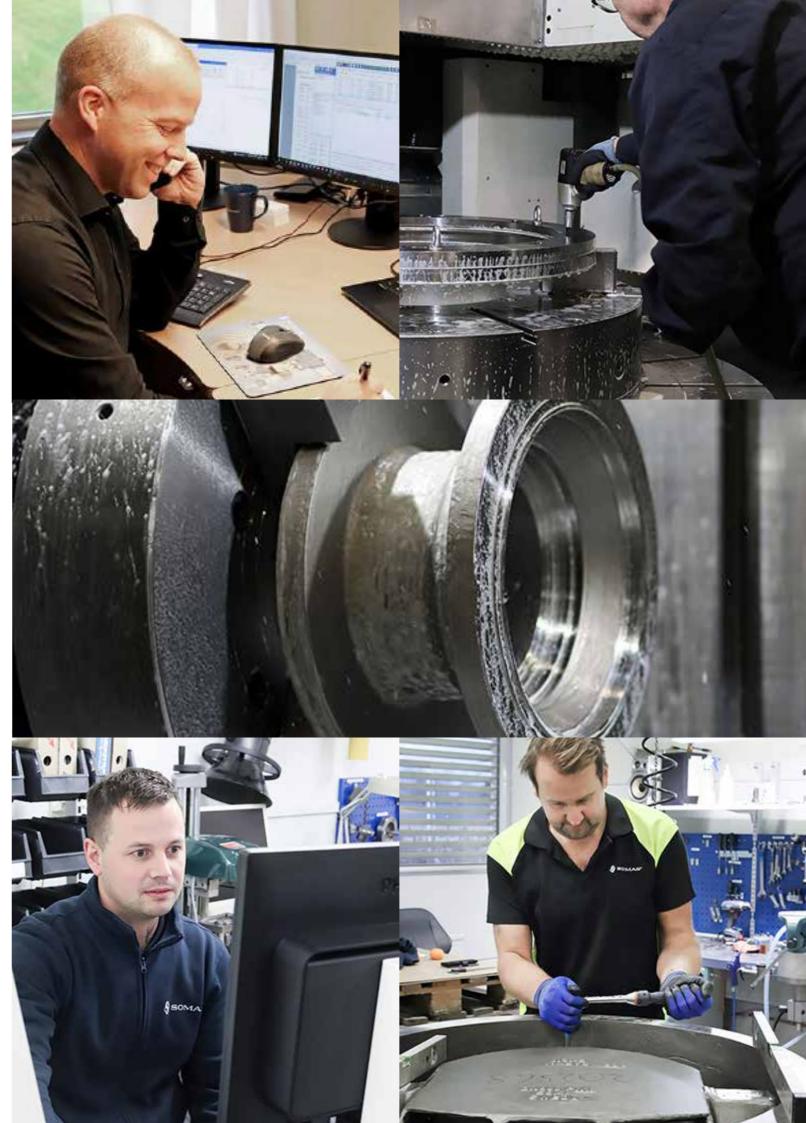


### **PRODUCT INFORMATION**

- Sizes from DN 80 to DN 1200
- Pressure classes PN 10 PN 100, Class 150 600
- Valve bodies available with lugs or flanges
- Homogenous seat made from stainless steel, not affected by high flow velocity
- Replaceable seat in various materials
- Unique triple eccentric disc
- Good tightness up to class V (standard) for metal seat and class V (standard) for soft-seal seat

# Butterfly valves







# Full-bore valve – low pipeline resistance

Leakage of gas and/or fluids is something that needs to be avoided at all costs. Somas ball valves are designed to take care of this. The valve is a full bore, flanged ball valve with a cylindrical bore made in dimensions from DN 25 to DN 500.

#### DESIGN

Somas ball valves have a homogenous ball with a cylindrical bore. The cylindrical bore contriputes to low pipeline resistance, which is beneficial for applications dealing with abrasive media

The valve is made from stainless steel with spring-loaded seats that provide good tightness even at low differential pressure. The ball is hard chromed as standard, but it can also be supplied as HiCo-coated if needed. The valves can be supplied with actuators and accessories for manual, on/off, or control functionality.

Somas' product range also includes 3-piece full-bore ball valves. These are manly intended for manual use or actuator-controlled on/off applications.

### COMBINE WITH AN ACTUATOR

If remote control of a ball valve is desired, it can be equipped with a pneumatic actuator. Manually operated valves are equipped with gear units.



### **PRODUCT INFORMATION**

- Sizes DN 25 DN 500
- Pressure classes PN 40, (DN 25 50), Class 300
   PN 25, (DN 80 500), Class 150
- Full cylindrical bore for maximum capacity
- Seats made from PTFE-53 or HiCo-alloy
- Good tightness regardless of differential pressure thanks to spring-loaded seats
- Hard chromed ball as standard
   (HiCo-coated ball available as an option)

### Ball valves

















# Actuators for proper valve function

Somas actuators have been specifically engineered to meet the process industry requirements for reliability and accuracy during regulation. They are first and foremost designed for our own valve selection, but they can also be combined with valves from other manufacturers that require 90 degrees of turning.

#### **SOMAS ACTUATORS**

We have put considerable effort in to ensuring backlash-free transmission between the actuator's moving parts and the valve. This results in the perfect conditions for accurate control. It also provides the opportunity to achieve a good degree of control of the entire process.

Somas also offers manual actuators such as hand levers and gear units. We can also supply electric and hydraulic actuators from well-known manufacturers.

### ACTUATORS FOR ALL BUSINESS AREAS

When a valve needs to be controlled remotely or otherwise opened and closed frequently, it needs to be equipped with some kind of actuator. Our pneumatic actuator is renowned for its simple and compact design, competitive pricing, and its ability to work optimally regardless of the environment it is installed in.

By equipping the actuator with accessories, it can be used for both control applications and on/off applications. Pneumatic actuators are very common and are used in most business areas thanks to their simple design and low price compared to other solutions. Electric and hydraulic actuators are also commonplace for certain applications and business areas.

### PRODUCT INFORMATION

- Compact design
- Patented backlash-free movement
- Low-friction seals
- Unique torque curve

### Somas actuators



















### Accessories

Somas offers a number of different accessories and technical solutions. Solutions including everything from basic pneumatics, to switches, to hydraulics and advanced digital products for control and monitoring. This facilitates services such as remote technical assistance and condition monitoring.

### WIDE SELECTION FOR OPTIMAL FUNCTIONALITY

Depending on the needs of the customer, we can offer a wide range of products with different levels of functionality. Several different communication protocols are available such as HART, Foundation Fieldbus, Profibus, AS-i, I/O-Link, etc. We also offer solutions for safety-critical equipment for different SIL levels depending on requirements/requests. Our experience also allows us to create the optimal valve suited for explosive environments. We can generally find a good solution for even the most complicated applications.

### **FACTS**

- Positioners
- On/off controllers
- Solonoid valves
- Limit switches
- Communication protocols: HART, Profibus, FF, etc.
- SIL and safety applications
- Explosive atmospheres (ATEX, IECE, CSA, UL, etc.)













### Accessories







Fisher

Siemens







Limit switches

Solenoid valves

Inductive proximity

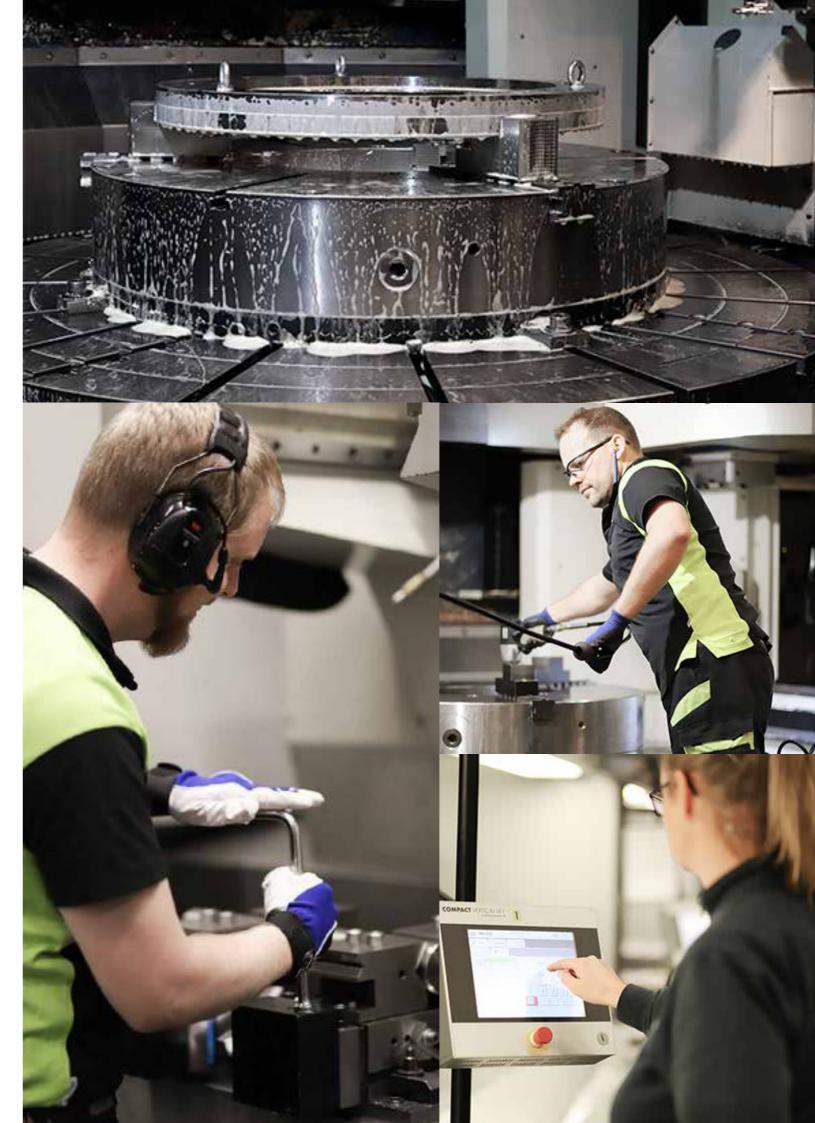






Somas mounting block with indication

Somas mounting block





# Where you can find our products

Our customers operate in a wide range of business areas with different applications and requirements. The list would be far too long if we were to mention all business areas where our products can be found. Instead, we choose to present a few examples.

#### A WIDE SELECTION FOR OPTIMAL FUNCTIONALITY

Regardless of which business area you work in, we most likely have the products and services you need. Somas valves are available in a wide range of materials and in different sizes. Good tightness and easy manoeuverability are two examples of our valves' biggest strengths.

With over 75 years of collective experience, we do our best to meet our customers' requirements. Beyond valves, actuators, and valve positioners, we also offer services such as tailormade service packages. Our products are designed to be easy to use and maintain wherever they are installed.

















BUSINESS AREAS/APPLICATIONS

BUSINESS AREAS/APPLICATIONS

### Pulp & paper 🔀

The pulp and paper industry is evolving faster than ever in order to help generate profitable and sustainable successes. Through progressive thinking and application experience, we do what we can to push the development towards more intelligent processes with improved efficiency, reliability, and environmental performance.

#### YEARS OF EXPERIENCE

With experience dating back to the mid-1950s we know the business area very well. We believe that experience is the key to best support our customers within the pulp and paper industry, experience that we are proud to say we possess. To create the ideal solution for a specific application, we need to understand the process and the driving forces behind it. This is where our experiences within the pulp and paper industry is key. It puts us in the ideal position to provide real value to you, our customers.





## Energy 👰

To achive an efficient process it is important to select and correctly size your equipment based on the intended application. We have a lot of experience when it comes to steam turbines and know that high capacity with accurate flow control and secure trip-functionality are required. Our valve selection provides the ideal solution for low- and normal-pressure steam turbines. By using our calculation tool SomSize®, you can find the right size for your specific needs to achieve the correct function.

### **GAS TURBINES**

Gas turbines used in energy production can start up very quickly. The turbines can also handle various types of fuel. In valve applications connected to gas turbines, it is imperative that the valve is not sensitive to clogging. Our valve selection can be used thanks to their safety conscious and advanced triple eccentric design. We understand that it is of utmost importance that production works efficiently, reliably, and safely. Our valve selection makes this possible.





### Marine applications

Our experience with the shipping and shipbuilding industry dates back to the early 1980s. With valve seats made from massive stainless steel, our product range is very suitable for this business area. Features such as low weight, short face to face dimensions, ease of maneuverability, and, above all, good tightness make our valves an excellent choice for marine applications. We can supply valves compliant with most industry-specific classifications.



A cargo valve needs to be able to stay tightly shut for liquids. Somas metal-seated valves are not as sensitive to impure media and are not affected by high flow velocity. This ensures that the valve maintains its tightness even after many years of use. This results in greater opportunities when it comes to time between maintenance. There are also solutions available to handle temperatures up to  $350^{\circ}\text{C}$ .





### Engines 🥞

Our valves for engine applications are designed to handle exhaust gasses and are becoming more and more sought after in the market. We have our sights set on leading the charge within this business area. Engine applications are challenging in several ways. The valves need to be able to handle difficult temperature cycles, high temperatures, soot, and corrosive substances in the exhaust flow as well as strong vibrations.

### RELIABLE VALVES

To minimize downtime for maintenance and repairs, special care has been taken to meet the demands of exhaust installations. Our valves are reliable and easy to maintain. We have a lot of experience when it comes to engine applications and are confident that we can provide you with both products and services of a high standard.





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BUSINESS AREAS/APPLICATIONS BUSINESS AREAS/APPLICATIONS

### Sugar 🥒



Sugar is a well-known product used in the food industry, but also to produce ethanol as fuel. The processes used to extract sugar from canes, beets, or grains often involve difficult conditions. Somas valves continually provide reliable performance for a high degree of productivity and long operating times. Our experiences within the area means that we can help.

#### TAILOR-MADE SOLUTIONS

Somas provides the sugar industry with tailor-made solutions such as on/off and control valves. Control valves are mainly used for steam applications. On/off valves are mainly used for applications involving raw and sugar





## Mining III



Mining and mineral processing involve demanding process conditions. Leeching, solvent extraction, and electro-extraction (LX-SX-EW) is a commonly used process when producing copper from low-grade oxidized ore. Copper is the most common metal processed using LX-SX-EW, but it can also be used to extract, purify, and concentrate other metals such as nickel, cobalt, and zinc.

#### APPLICATION EXAMPLE

Somas supplies valves to various customers within the business area of mining, such as copper mines where sulfuric acid is used during the leeching process. Somas valves are also used in installations where nickel and phosphorus are produced. Our valve selection includes several different materials to handle (among other things) the flotation process in acidic and abrasive environments.





### Chemical industry

The chemical industry is sensitive considering it often handles dangerours substances. This creates high requirements on the valves used. Our experts with vast knowledge of various chemical plant processes will work in close collaboration with you to choose the right valve for each specific use. Our valve selection covers standard designs as well as application-specific technology that ensures the optimal solution for you and your needs.



We believe we can be the trusted partner for your facility. A partner that meets demands and is there to offer you a helping hand through your project and during the valve's entire lifecycle. We are very thorough when developing our valves. They are carefully designed, and the materials used are chosen with to meet the demands set by each process. Our valve selection is suitable as both control and remote/manual on/off valves. They are made from stainless materials and can also be supplied in titanium or high nickel alloy if needed.

## Oil and gas 💐



In the oil and gas industry, security is key. Offshore applications are often exposed to harsh conditions. This requires the right materials and correct safety documentation to comply with both national and international standards. International standards (ISO/IEC) and European standards (CEN / CENELEC) serve as the basis for all activities carried out by companies working within the oil and gas industry.

Based on the above-mentioned standards, NORSOK is a good basis for how we can achieve the most secure and profitable scenario when it comes to design and manufacturing of valves for this particular business area. We have years of experience and are used to providing products based on both NORSOK and other applicable standards. We are confident we have the experience our customers need.









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### Service

The development and manufacturing of Somas valves and related products is handled by our own employees; there is no one who knows our products better than us. Let us handle the maintenance of your products, and we will guarantee that the service will be conducted professionally. Our service department has substantial experience from different processes and applications.

#### **OUR OFFER**

We assist our customers with everything from checking out to commissioning of facilities and repairs/maintenance, either on-site or in our own workshop. We also offer replacement valves as part of our service concept, which means that we exchange the customer's valve for a refurbished one with a "good as-new" warranty. Our service solutions are the key to extending the lifespan of our products, a decreased need for stockpiling spare parts, shorter stops in production, and lower costs for our customers.

### SERVICE THAT FITS YOUR NEEDS

You choose the service that suits your needs. Do you want us to inspect your valves and establish a plan of action? Do you want us to handle repairs on-site or in our own workshop? We can also review your stock of spare parts and minimize your need for them. You decide what kind of services you need from us.

### INSTRUCTIONAL VIDEOS

How do you replace a soft valve seat, spring washer, or a ball segment on a Somas ball segment valve? How do you install and set up our valves? We have multiple instructional videos that make it easier for you to maintain your valves.

#### SERVICE PACKAGES

Do you want to make a safe purchase knowing that we will quickly help you if you run into issues? You should complement your products from Somas with a service package. Our service team helps you in case of emergencies, preventative maintenance, and training. Everything based on your needs.







### Training

Our training courses are designed to teach you things that are of direct use to you in your daily work. Visit us at Somas Training Centre and receive tailor-made training suitable for anyone working with valves in industrial processes and who wants to increase their knowledge.

We offer training focused on various areas, all of them designed to suit you and your needs. The more you know about how your valves and accessories work, the better you can understand your process.

### WHY SHOULD YOU ATTEND OUR TRAINING COURSES?

As the leading manufacturer of control valves in Sweden, we have a lot to offer in terms of knowledge and experience. To ensure our training courses maintain a high standard, they are designed with smaller groups of participants in mind, including about 8 people per event. Tighter communication and opportunities for discussion is of great use to you as a participant.

### TRAINING MADE FOR YOUR COMPANY

Are there several of you working at the same company that wish to attend our training courses? Do our set dates not align with your calendar? Contact us and we can arrange a tailormade training course for your company. The training takes place in our own offices or a location of your choosing. We are happy to tailor the contents of the training to your needs.

### **OUR TRAINERS**

Whichever training course you attend you will meet our trainers, all with many years of experience. Our courses are also a natural meeting place for people with similar jobs, which results in an exchange of information between participants and is an important part of the training.







### SomAware®

Somas has developed multiple tools that make your work easier. SomAware® gives you access to our digital portfolio. We offer products, systems, solutions, services, and a platform that lets you know more and do more to affect the performance of your valves. The platform is under continuous development based on our customers' processes.

If your valves could talk, what would they say? We have the answers!

The question is, are you ready to listen?



#### SIZE VALVES UP RIGHT, SAVE MONEY!

Choosing the correct dimensions of a control valve is one of the key factors for achieving the best possible result when using Somas control valves. It is also important because using the right size valve can offer you the opportunity to save money.



### WHEN YOU WANT TO HEAR EVERYTHING!

Make sure you listen when your valves talk!

SomVerify uses remote access technology that can save both time and money. With the right technology, potential issues with remote positioners, pneumatic actuators, or valves can be identified before they cause issues in your process.



### FIND YOUR APPLICATION AND GET HELP CHOOSING THE RIGHT VALVE

SomBook® is our application handbook and is an interactive tool where we have collected our experiences. It can help you choose the right valve type and the right materials. You can also find information regarding what valves we recommend for speciffic applications.



#### **EVERYTHING IN ONE PLACE!**

Your valves are unique. By entering its serial number you can find all relevant information for that specific valve. It couldn't be easier! Are you looking for spare parts or manuals? You can find everything in the same place.



## Somas workshop

Somas' state-of-the-art production facility is equipped to handle the majority of processing tasks on-site in Säffle. Thanks to well-planned investments, we have the high-tech equipment needed to manufacture valves and actuators.

### HIGH-TECH PRODUCTION

Our mechanical equipment consists of both maual and automated machines. Several of these machines can handle complete processing of different parts using processing blueprints generated in CAD/CAM. Processing is mostly handled using controlled machines or with FMS (Flexible Machine System) cells.

Unmanned manufacturing also takes place in several of our machines. These are constantly monitored to ensure stable processes, and everything from control/verification of measurements, tool breaking, cutting shafts, to tool inspections are checked regularly. Final checks of all parts are done using our measurement machines.





All of our products are tested in accordance with current standards, both with and without accessories. Our workshop and production methods are both constantly evolving thanks to close collaboration with various partners. We are constantly working to improve and are excited to see what the future and machine learning has in store.



