



SOMAS[®]



No	Dag, då		Aumilans innehåll	Firmans innehavare	Förkortad och förkortad enligt 15 § försäkrings samt en inskrifning i bolagsordens belegg för att teckna firmen	Anmärkningar	Aumilans No
	ansökan inlämnad i registret	inskrifningens tillfälliga					
1	14/12 1945	27/12-45	Even Ragnar Hägg och Sten Folke Herbert Carlén, båda i Säfte församling, hems drästmått med postadress Säfte i hollig driva fabriksverksamhet samt idka handel under firma Sliperi & Mekaniska arbeten, Hägg & Carlén, vilken firma tecknas av bolagsmännen var för sig.	EVEN RAGNAR HÄGG och Sten Folke Herbert Carlén.			581 1945

Rätt utdraget bevisar; Karlstad i landskansliet den 27 december 1945

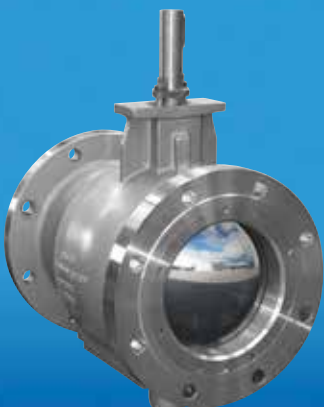
På tjänstens vägnar:

Stämpel kr. 3.-

SOMAS was founded in 1945. At this time the main business consisted of grinding and polishing cutlery. The name SOMAS is an acronym derived from: "Sliperi Och Mekaniska Arbeten Säfte" (the Säfte Grinding and Mechanical Works).



Already at the end of 1940's SOMAS made deliveries to export markets.



Family business in Säffle



From left: Lars and Peter Hägg

SOMAS head office and main factory is located in the company's fully owned facilities in Säffle, Sweden. SOMAS is a family business owned by the Hägg family. Peter Hägg is the Managing Director, Lars Hägg is the Purchasing Manager. Sales are managed by SOMAS own sales force as well as by independent distributors. All of our products are manufactured in Säffle.

SOMAS Instrument AB develops, produces and markets control, on/off and manual valves made from high-grade, acid-proof stainless steel. We export our products all over the world.

SOMAS business concept

To be dedicated to R&D, manufacturing and marketing of high-quality valves and accessories for control, on/off and manual applications.

SOMAS – security and continuity

During our more than 70 years in the business, we have come to realize that security and continuity are important issues for our customers. So providing security and continuity has become a natural and fundamental part of our customer relations.

We tend to claim as proof-of-concept of our policy that we have now become the market leader in control valve development. We intend to remain so also in the future.



Ball Segment Valves

SOMAS ball segment valves are designed to fulfill the strictest requirements of the process industry for control valves. Due to its free flow and choice of different materials, both for valve body and seat, the ball segment valve is usually the best choice for the industry.

The ball segment valves high capacity results from the design of its seat and ball segment. Compared to other valve designs, it is often possible to use smaller and more economical valve sizes. What puts SOMAS ball segment valves apart from many other suppliers, is that the free flow part minimises the risk of clogging and the valve is designed to maximize controllability.



Ball Segment Valves



SOMAS ball segment valves offers various options depending of the actual application

- Dimensions in the range DN25/2 – DN700.
- Pressure Classes PN10 – PN100.
- Good tightness in accordance with current industry and application requirements.
- Ball segment and shaft as a one-piece design, gives backlash-free operation and accurate control.
- Trunnion-mounted segment gives high durability and low torque requirement.
- Body design makes maintenance easy. Seat can be exchanged or replaced without removing the actuator or dismantling the valve.
- Valve body for centrally mounted ball segment with continuous seat-trim contact to eliminate potential problems with build-up and fluid crystallisation.
- Valve body option for eccentrically mounted ball segment for clean hot medias like steam and gas at high temperatures – maximum 550° C.
- Trim options available to solve problems with noise and cavitations.
- Trim options available for High consistency applications.



Butterfly Valves

SOMAS butterfly valves help to adjust your flow, steam, gas, water or other fluids.

Our butterfly valves are made from high-grade stainless steel with a homogenous metal seat as standard. They can be installed by mounting between flanges, with or without lugs. The valves are also available with flanges.

SOMAS metal-seated butterfly valves of type VSS and MTV have an advanced triple-eccentric design. The design of the seat and the unique construction of the disc provide excellent shut-off and more or less eliminate the need for maintenance. The high surface pressure between seat and disc makes the valve useful for pulp applications where the fibers are easily cut. The butterfly valve is the most cost-efficient choice for control and on/off-applications.

The universal design allows a choice of many different materials in valve manufacture. This broadens the field of application. The metal seat ensures that high-velocity flow will have no effect on the valve's tight shut-off ability and allows many years of trouble-free operation.

Dimensions up to DN1200 up to DN1600 on request, pressure classes PN10 - 100 and the universal design allows for manufacture in many different materials and enables us to cover most applications in the process industry.



Butterfly Valves



The butterfly valve is useful for clean as well as contaminated media as well as fluids, gasses and steam. For control installations the valve is mounted with SOMAS pneumatic actuator and positioner.

SOMAS butterfly valves have many advantages

- Made of stainless steel.
- Dimensions DN80 – DN1200, up to DN1600 on request.
- Pressure Classes PN10 – PN100.
- Mounting between flanges, with lugs or flanged.
- Stainless steel seat that is not affected by high flow velocity.
- Replaceable seat in alternative materials.
- Unique disc geometry, which in combination with the homogenous seat achieves good tightness in accordance with current industry and application requirements.
- Advanced triple eccentric design gives excellent tightness.



Ball Valves

SOMAS ball valve is designed for on/off-applications. The valve is a full bore, flanged ball valve with cylindrical bore made in dimensions from DN25 – DN500. The valve is made from stainless steel with spring loaded seats for good tightness, even at low differential pressure.

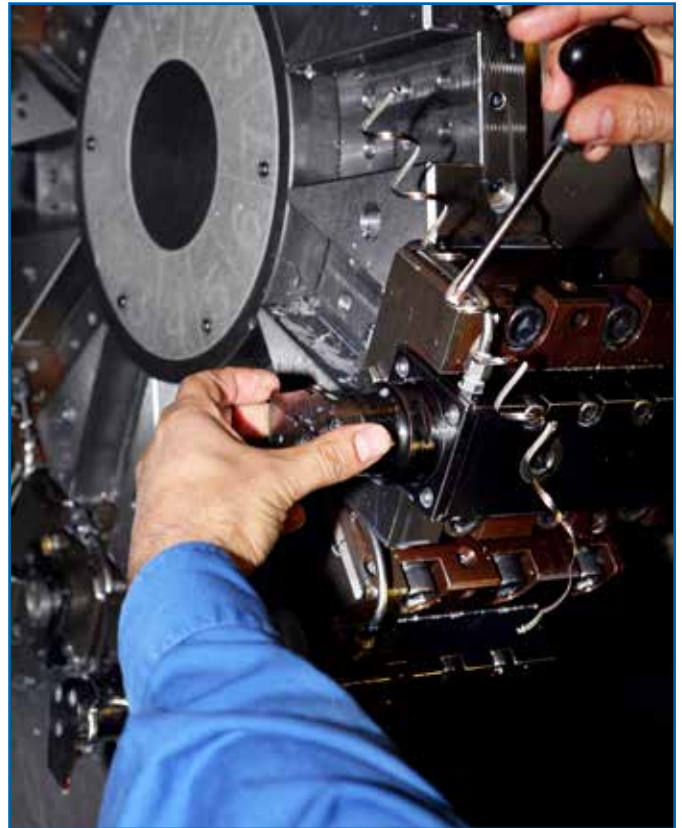
The valve ball is hard chromed as standard, but can also be supplied with HiCo-coating. The valve can be supplied with actuator and accessories for manual operation, on/off or control applications.

Ball valves also in 3-piece form

SOMAS 3-piece full-bore ball valves are mainly intended for use as manually operated valves or remotely actuated on/off valves. The ball valve is equipped with mounting flange according to ISO standard for direct mounting of actuator.

The valve is available with threaded ends, welding ends or flanges. It is also possible to combine different types of ends.

SOMAS 3-piece full-bore ball valves are equipped with seats of two materials. Fibreglass-reinforced PTFE as standard or carbon-filled PTFE for steam applications.



Ball Valves



SOMAS offers two types of ball valves, SKV and 3-piece full bore ball valve

Type SKV

- Dimensions DN25 – DN500.
- Pressure Classes PN10 – 25 (DN80 – 500) PN10 – 50 (DN25 – 50).
- Full cylindrical bore for maximum capacity.
- Hard chrome plated ball as standard. HiCo-coated as an option.
- Seats in PTFE 53 or HiCo (High Cobalt alloy).
- Spring loaded seats for good tightness at low differential pressure.
- Complete range of actuators and accessories for manual operation, on/off or control applications.

Type 3-piece full bore ball valve

- Dimensions DN15 – DN100.
- Pressure Class PN40, PN63.
- 3-piece full bore for maximum capacity.
- Two alternative seat materials, PTFE or carbon filled PTFE.
- ISO connection for actuators.
- Three alternative pipe connections. Threaded, weld ends or flanged.



Actuator / Positioner

SOMAS actuator type A is a custom designed actuator optimally adapted to meet the industries demand for reliability and accuracy. The actuator is primarily intended for use with SOMAS valves but they also fit other rotary quarter-turn valves.

SOMAS actuator type A-DA is double-acting and designed to meet the highest requirements for control applications.

SOMAS single-acting actuator type A-SC/SO is in principle identical to the A-DA-actuator, the difference is a spring device for opening or closing function at air failure.

Special attention has been made to achieve low friction and zero backlash. The coupling eliminates backlash between actuator and valve which optimizes control performance.

All of our actuators have passed comprehensive quality control before shipping and all our solutions meet the demands of the process industry for function and reliability.



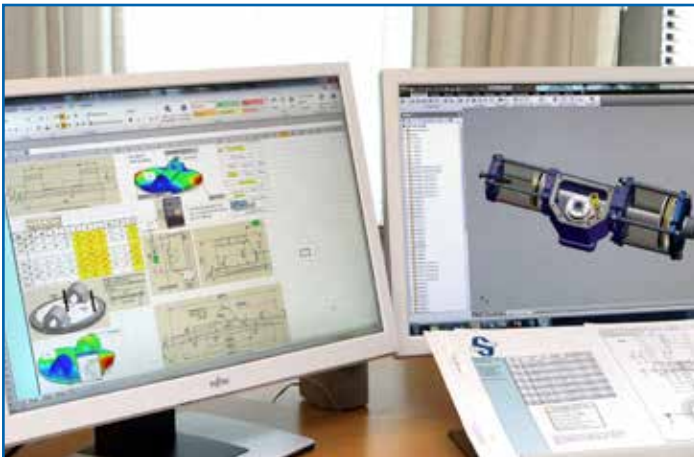
Actuator / Positioner

Positioners / Switchboxes

SOMAS actuators can be equipped with a number of accessories to obtain the functions desired. The most common accessories for our control valves are the positioners type SP405 / SPE405 and various types of digital positioners of different brands.

Solenoid valves and limit switches are available for our on/off valves as accessories easily mounted on SOMAS actuators, either directly or by means of a patented mounting block.

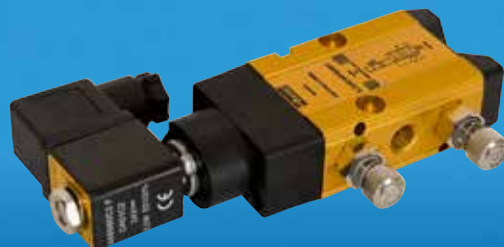
SOMAS pneumatic positioner, type SP405 and electro pneumatic positioner, type SPE405 are intended for actuators with a rotary motion up to 90°.



Accessories

Solenoid valve

For on/off-applications the supply air is fed through a solenoid valve mounted directly on the actuator. We use products from well-known manufacturers, which makes it possible to create custom-made solutions for special functions. The tubing between solenoid valve and actuator is either plastic or stainless steel.



Accessories

Limit switches

Many on/off-applications require an indication for closed and/or open position.

SOMAS offers a wide range of alternative solutions including micro-switches as well as proximity switches.



Workshop

Most of machining, assembly and quality control is done in our own facility in Säfte, Sweden. With well planned investments, we have today state-of-the-art machine tools for production of valves and actuators. Most of the machining is done with computer controlled machine tools and in some FMS cells (Flexible Machine System). Unmanned production is carried out in a number of machines.



Workshop



Inspection and control of the machining takes place close to each machine tool or in a special coordinate measuring machine. All valves are pressure tested and checked for tightness according to recognized international standards, e.g EN 60534-4 and EN 12266-1. It's not only the bare shaft valve that is tested, but also the complete valve unit including actuator, positioner or limit switch. Calibration of accessories is done before delivery. All data is documented and saved.



Service and Training



Service

SOMAS is part of the process from beginning to end, a fact that allows us to claim that we know our valves inside out. The skills and experiences of our engineers ensures that you will get your valve back in same condition as a new one.

Training

SOMAS goal is to maintain a deep and dynamic dialogue with the customer. As part of this process, we share our competence at our training center, where we offer practical and theoretical courses on valve operation, maintenance, flow theory and general valve theory.

Our courses are designed to improve the knowledge and general understanding of our customers operators and maintenance staff.

Please contact us for more information about training programs.



Service and Training

Service – an important part of SOMAS quality concept

When you choose SOMAS product line, you will get products designed for trouble-free operation that will require a very low level of maintenance. What more can you ask for? However, it's still important to carry out regular inspections in order to ensure proper operation.

Select maintenance plan according to your needs

If you let us handle the maintenance of your SOMAS products, you can rest assured that it will be carried out with the highest level of professionalism. You can freely choose the maintenance plan best suited to your needs. Do you want us to carry out inspections and report any valves in need of servicing, or do you want us also to carry out repairs on-site? If you let us manage your spare part inventory we can reduce the number of parts you have to keep in stock.

SOMAS service and maintenance policy

A new or reconditioned replacement valve with full warranty means security and economy. For you as a customer this is the key to cost reduction by minimizing spare part inventory size, lower replacement costs and shorter intervals of suspension of operation.

If you need any check out and start-up assistance, we are more than happy to help. All you have to do is get in touch and we'll be there for you.



Applications

Shipping

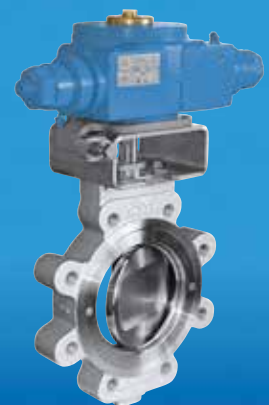
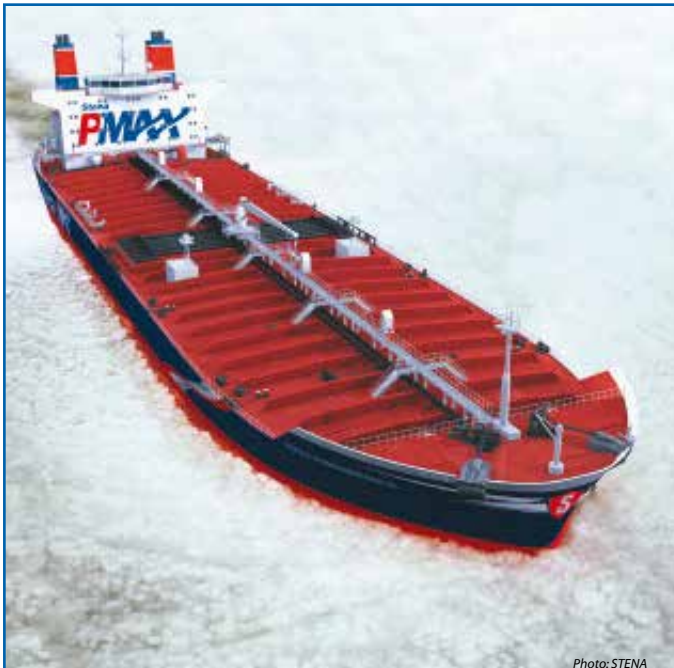
The butterfly valve is the perfect valve for the marine industry. Due to the design of the valve with the solid seat and the unique disc design the valve has an excellent tightness and works very good in marine applications.

Cargo valve for liquids and chemicals

Our butterfly valve is used as cargo valve. The valve is not affected by high flow velocities and will keep its tightness even after many years operation.

Cargo valves

- Dimensions DN80 – DN400.
- Pressure Classes PN10 – PN25 and Class 150.
- Valve body in wafer style or lugged version.
- Unique disc design and solid metal seat give good tightness in accordance with current industry and application requirements.
- For applications with temperatures up to 350°C.



Applications

Gas and Diesel Engines

SOMAS valves have been used during many decades to control the exhaust gas flow after the combustion in large engines for marine and on-shore installations. Modern requirements for fuel efficiency and environmental considerations have increased the need for accurate control and tight shut-off capability of the exhaust gas flows. The typical exhaust gas applications today are: waste gate, cylinder bypass and systems for selective catalytic reactor, exhaust gas recirculation, waste heat recovery and turbo cut-out for slow steaming.

SOMAS Exhaust Gas valves

The butterfly valve is the most suitable type of valve for exhaust gas applications. SOMAS unique disc and flexible metal seat designs provides a very efficient control element for exhaust gas applications where the valves must handle severe temperature cycles, soot and other corrosive substances in the gas flow as well as severe vibrations. The design of the bearing sleeves and shaft seals are adapted to the specific requirements of the exhaust gas applications to minimize the time for maintenance and repair work.

The SOMAS valves are also using an extended shaft to allow the use of extended brackets to mount the actuator to the valve. The actuator with accessories are more sensitive to the heat compared to the valve, so it is important to move these parts away from the hot valve as much as possible.

The actuators provide a fail-safe position and is typically a pneumatic actuator with accessories providing the requested functionality. Also, electrical actuators can be used, but they are not so common.

- Dimensions butterfly valves DN80 – DN1200, up to DN1600 on request.
- Dimensions ball segment valves DN25 – DN65.
- Connecting flange rating PN10 – 50.
- Butterfly valves with metal seat and ball segment valves with HiCo-seat have good tightness in accordance with current industry and application requirements.
- Maintenance friendly design makes it possible to easily exchange seat, bearing sleeves and packings.
- Standard valve up to 550°C.
- High temperature valve up to 700°C.



© Winterthur Gas & Diesel Ltd.



Applications

Pulp and Paper

SOMAS comes from an area where the pulp and paper industry has been the main industrial sector. This industry has largely shaped SOMAS traditional valve program, characterized by the acid-proof stainless steel in the all wetted parts.

Cellulose industry

Cellulose industry or pulp industry has many applications for SOMAS valves. Blow line valves, valves for liquor circulations, valves for pulp flows to screening and bleaching plants. Many applications require special valve material (such as duplex stainless steel and/or titanium) to withstand the corrosive environment. Cellulose industry also has a cooking chemical recovery that needs quality valves like SOMAS valves.

Paper industry

The paper machine has a seemingly endless need for high performance SOMAS valves. The liquid flows both with and without fiber content, to the paper machine's wet end where the sheet is formed and water from the press is transported away. Steam flows for the dryer section. SOMAS have been able to offer valve seat solutions that work on the whole paper machine.

Other areas

Around pulp mills and/or paper mills several other functions are needed. Waste water treatment and fresh water intake. These facilities of course use SOMAS valves.



Applications

Steam/Gas turbines and Energy

Steam and steam turbines

SOMAS butterfly valves are used as quick shut down valves and inlet control valves for middle and low pressure steam turbines. Also for various turbine extraction systems. SOMAS valves are used for control and shut-off. Steam is produced in various types of boilers fired with fossil fuels. Today many of the valve deliveries have been made to the so-called Solar energy project, where the steam generated by solar energy. Either the solar energy is focus with mirrors toward a tower (Tower Power) or focused with mirrors on a long black tube (Parabolic Trough). The function of SOMAS valves are the same regardless of how the steam is generated.

Gas turbines

Gas turbines (which is basically designed as jet engines) as energy producers are of interest for their ability to upstart quickly. Gas turbines can also handle different fuels. SOMAS valves are used on gas turbines to handle the excess air from the compressors when the gas turbine must be quick stopped. SOMAS valves also control the air to bearing, cooling and various sealing systems.



Certificates

SOMAS is certified in accordance with ISO 9001:2008.

SOMAS is certified in accordance with PED 2014/68/EU. The valves comply with the requirements of the directive in accordance with module H.

SOMAS valves and actuators can be delivered with ATEX approval in accordance with ATEX directive 2014/34/EU.

SOMAS valves and actuators can be delivered in accordance with directive 2006/42/EC – Machinery, as partly completed machines followed by a declaration of incorporation.

SOMAS valves and actuators are type approved by Lloyds, BV and EAC/CU-TR.

SOMAS can provide Failure Modes, Effects and Diagnostic Analysis for calculation of Safety Integrity Level (SIL) and Performance Level (PL).

SOMAS Butterfly Valves are fire-safe certified according to ISO 10497/API 607.

SOMAS complies with the REACH requirements.

Additional approvals can be provided on request.



Stock

To be able to meet the requirements of the process industry for short delivery times, SOMAS always has a stock of standard valves. You can always find pressure tested, bare shaft valves ready for delivery.



Concern and head office:
SOMAS Instrument AB
Norrlandsvägen 26
SE-661 40 SÄFFLE
Sweden

Phone: +46 (0)533 167 00
E-mail: sales@somas.se

Sales office, district north:
SOMAS Instrument AB
Thulegatan 20
SE-852 36 SUNDSVALL
Sweden

Phone: +46 (0)60 17 17 90
E-mail: sundsvall@somas.se

Sales office:

**SOMAS Instrument AB Beijing
Representative Office**
Room 609, 6/F CYTS Plaza, No. 5
Dongzhimen Nandajie,
Dongcheng District, BEIJING 100007,
P.R. China

Phone: +86 10 5815 6350
Fax: +86 10 5815 6255
E-mail: sales@somas.net.cn

SOMAS S.à.r.l
2 rue de la Thur,
FR-68800 VIEUX-THANN
France

Phone: +33 389 35 74 61
Fax: +33 389 35 78 23
E-mail: sales@somas.fr
Website: www.somas.fr

SOMAS G.m.b.H.
Daimlerstraße 9,
DE-41564 KAARST
Germany

Phone: +49 2131 / 51293-0
Fax: +49 2131 / 51293-20
E-mail: info@somasgmbh.de
Website: www.somasgmbh.de

SOMAS A/S
Gustadveien 29,
NO-3340 ÅMOT
Norway

Phone: +47 32 12 62 00
Fax: +47 32 12 62 03
E-mail: sales@somas.no
Website: www.somas.no

For distributors in other countries – see our website.



www.somas.se