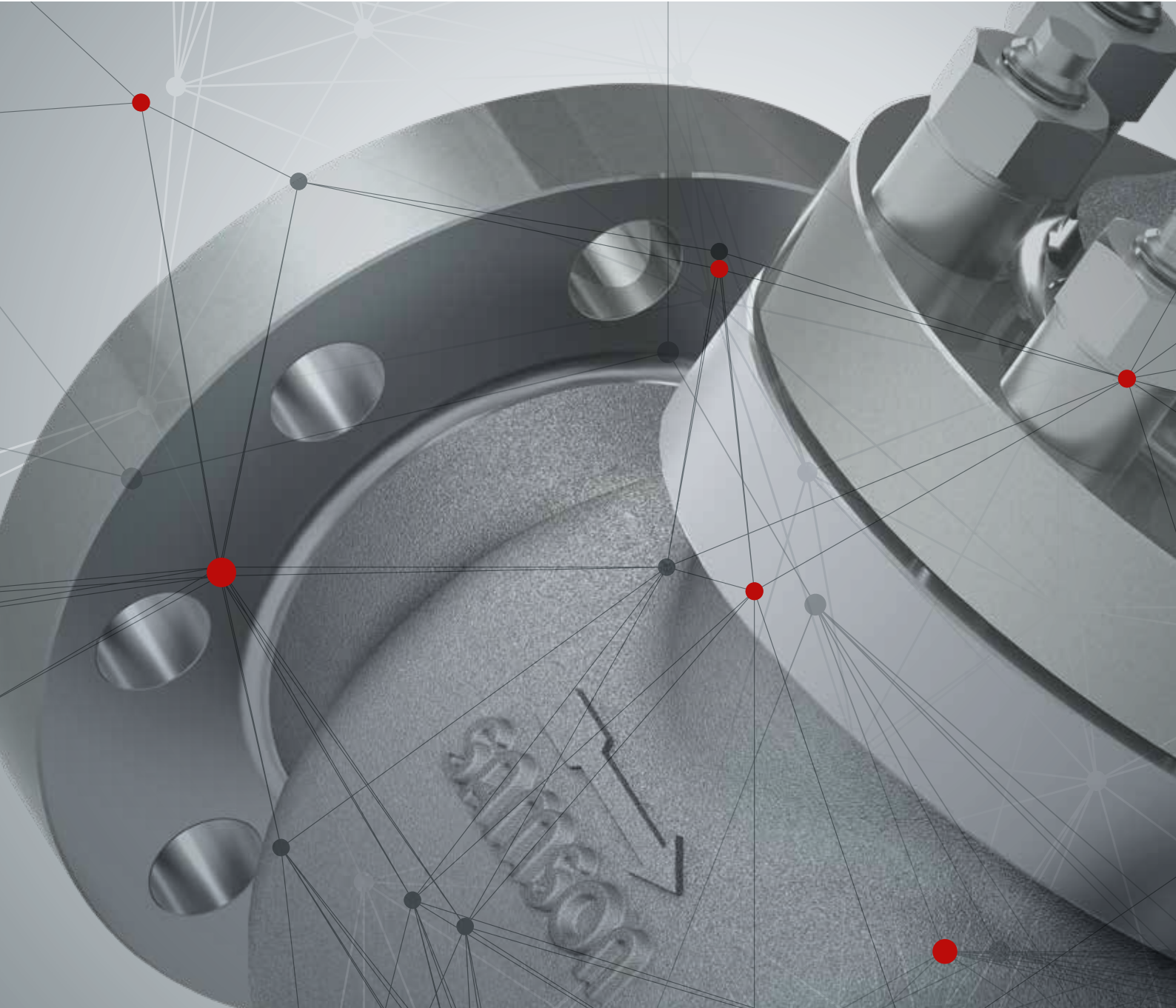


Product Portfolio



SAMSON Product Highlights for the Process Industry

SMART IN FLOW CONTROL

GLOBE VALVES

SAMSON globe valves provide measured control of your fluid processes, such as non-corrosive, corrosive and erosive media, steam, hygienic and aseptic media.



Standard · 3241

Rugged design for all control applications with optional bellows seal, insulating section and suitable for use in cryogenic applications.

Pressures up to: PN 40/Class 300

Sizes up to: DN 300/NPS 12



General Service · 3321

The perfect economic solution for less demanding applications: the Type 3321 is optionally available with Type 3371 and Type 3372 Actuators.

Pressures up to: PN 40/Class 300

Sizes up to: DN 100/NPS 4



SMS · High Pressure · 251GR

Designed for more demanding applications with field-interchangeable seat retention designs combined with multi-plug options, this new modular design meets the highest standards.

Pressures up to: Class 900

Sizes up to: NPS 8

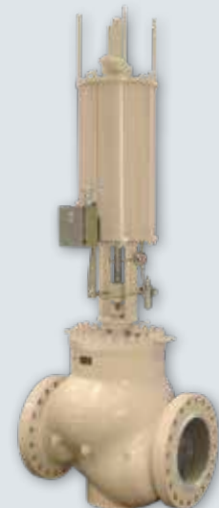


Three-way · 3244

Based on the Type 3241 standard globe valve, the Type 3244 Three-way Valve provides both mixing and diverting service and has many of the options offered for Type 3241, including bellows seal and cryogenic extension bonnet.

Pressures up to: PN 40/Class 300

Sizes up to: DN 150/NPS 6



Severe Service · 3595

For the toughest applications with globe or angle style bodies, the plug is cage guided across the entire travel range with minimal clearance to reduce vibrations. Optional trims for liquids and gases to minimize noise and wear.

Pressures up to: Class 2500

Sizes up to: NPS 32

SPECIAL GLOBE VALVES

SAMSON has built on the success of its standard valve range to develop application-specific products tailor made for optimized control applications in various industries.



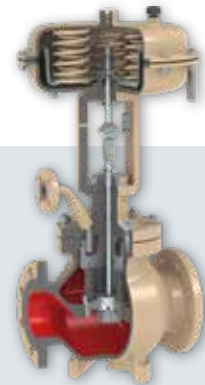
Micro-flow · 3510

Designed for very low flow rates with optional bellows seal and insulating section.

Suitable for throttling service and available in special materials and high-pressure versions.

Pressures up to: PN 400/Class 2500

Sizes up to: DN 25/NPS 1



Steam Conditioning · 3281

Designed to reduce the pressure and temperature of steam to controlled set points by injecting water downstream of the valve.

Pressures up to: PN 160/Class 900

Sizes up to: DN 300/NPS 12



FROSTY · Top-entry Cryogenic · 3598

Designed for cold-box applications with minimal loss of energy by using a circulation inhibitor and cryogenic extension bonnet. In-line serviceability for low cost of operation in all cryogenic applications down to -273 °C.

Pressures up to: Class 900

Sizes up to: NPS 8



Aseptic · 3349

Control valve for aseptic applications in the food and pharmaceutical industries with USP-VI diaphragm.

Compliant with 3-A regulations and certified by EHEDG.

Pressures up to: 25 bar/360 psi

Sizes up to: DN 6 to 100/NPS ¼ to 4



Hygienic · 3347

Self-draining angle design for hygienic applications, wetted sealing materials comply with EN 1935/FDA regulations. Metal or soft sealing plug. Bar stock and cast bodies available.

Pressures up to: 40 bar/580 psi

Sizes up to: DN 150/NPS 6

ROTARY VALVES

SAMSON manufactures a variety of rotary valves that provide high flow capacities in a compact body to meet specific application needs.



Segmented Ball · 3310

By combining high rangeability with precise control, the Type 3310 offers high flow rates in a compact design with both linear and equal percentage trims. It also has EN 1935/FDA seals and optional ISO 15848-approved packings.

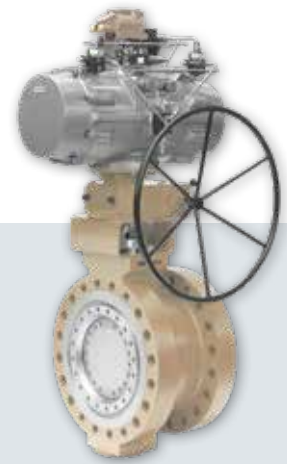
Pressures up to: PN 40/Class 300
 Sizes up to: DN 300/NPS 12



Ceramic Lined · KST

Ceramic-lined ball valve suitable for corrosive media with abrasive solid content. The high-quality ceramic internal parts provide excellent wear resistance. Using the V-ball, the valve is suitable for on/off and throttling service.

Pressures up to: PN 40/Class 300
 Sizes up to: DN 300/NPS 12



Triple Offset Butterfly · LTR 43

The triple-offset design ensures seat contact only when fully closed. This minimizes wear while providing a high flow capacity when fully open. The low operating torque reduces the actuator size, resulting in a compact control solution. Cryogenic and high-temperature versions available, also suitable for on/off service.

Pressures up to: PN 420/Class 2500
 Sizes up to: DN 2300/NPS 92



Axial Flow · 3599

Precise control and high flow capacities combined with a high rangeability in a compact design with balanced plug and stem guiding for smooth operation and a variety of cage designs to handle critical applications.

Pressures up to: PN 40/Class 2500
 Sizes up to: DN 1200/NPS 48



Rotary Plug

Double-eccentric rotary plug valves are perfectly suited for applications where high volume flow vs size ratio or a high rangeability are decisive factors. Extremely low sensitivity to dirt and particles in severe service applications.

Pressures up to: PN 420/Class 2500
 Sizes up to: DN 600/NPS 24

ON/OFF VALVES

SAMSON produces a wide range of on/off valves for applications to complement the throttling valve range.



Globe · 3351

Functionality of a globe valve, but for on/off service requiring Class VI shut-off. Complete with self-adjusting stem packing and actuator. EN 1935/FDA seals available on request.
Pressures up to: PN 40/Class 300
Sizes up to: DN 100/NPS 4



Ball · BR 26d

Full bore design available in both DIN and ANSI face-to-face dimensions. Corrosion-resistant version with live-loaded stem packing available. Pressures up to: PN 40/Class 300
Sizes up to: DN 150/NPS 6



Severe Service · RINGO

Wide range of pressure and design standards with fully welded, top-entry and trunnion-mounted design. API 6A compatible with a range of seat options to meet application-specific requirements.
Pressures up to: Class 2500
Sizes up to: NPS 56



Diaphragm · KMA 905

Cavity-free diaphragm valve with rising handwheel and optical safety indicator, sealed bonnet with internal travel stop and locking device. CDSA sealing concept eliminates product entrapment to improve cleanliness and drainability.
Pressures up to: 10 bar/150 psi
Sizes up to: DN 50/NPS 2

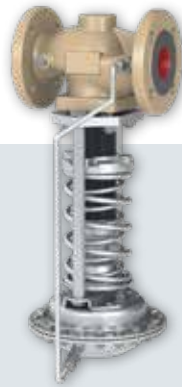


Butterfly · BR 14b

Double-eccentric design for general service applications with low- and high-temperature versions available. Lugged design with anti-blowout stem for safety.
Pressures up to: PN 40/Class 300
Sizes up to: DN 800/NPS 32

SELF-OPERATED REGULATORS

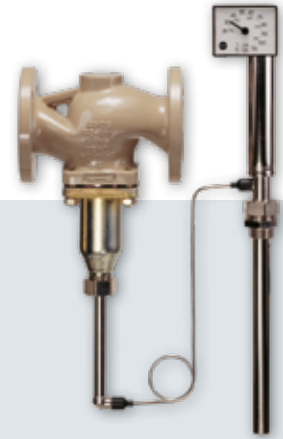
SAMSON self-operated regulators for liquids, gases and vapors use the process medium to function. Auxiliary energy is not required. SAMSON offers self-operated regulators for pressure, temperature, differential pressure, flow as well as combined regulators.



Pressure · 41-23

The valve closes when the downstream pressure increases. Wide set point range with easy adjustment and low-noise plug as standard. Optional control line directly from valve cavity. Also available as excess pressure valve (opens when the upstream pressure increases).

Pressures up to: PN 40/Class 300
 Sizes up to: DN 100/NPS 4



Temperature · 4/2231

Low maintenance requiring no auxiliary energy with a wide set point range and easy adjustment. Suitable for liquids, gases and vapors, especially for heat transfer media, such as water, oil and steam.

Pressures up to: PN 40/Class 300
 Sizes up to: DN 150/NPS 6



Flow · 42-36 E

Designed to control the flow rate in the pipeline with an adjustable set point at the restriction. Can be installed in either the flow or return pipe, giving high control authority. Screw connection as an option.

Pressures up to: PN 40/Class 300
 Sizes up to: DN 250/NPS 10



Differential Pressure · 42-24

Low-noise, medium-controlled proportional regulator requiring little maintenance. Suitable for circuit water, water/glycol mixtures, steam and air as well as other liquids, non-flammable gases and vapors. Wide set point range.

Pressures up to: PN 40/Class 300
 Sizes up to: DN 250/NPS 10



Pressure · 2371

Designed especially for pressure reducing applications in the food, beverage and pharmaceutical industries. EC 1935/2004/FDA/USP-VI compliant materials. Self-draining design with no dead cavities. Also available as excess pressure valve.

Pressures up to: 10 bar/150 psi
 Sizes up to: DN 50/NPS 2

PTFE/PFA-LINED VALVES

SAMSON specializes in tailoring lined valves to meet strictest requirements and offers solutions across the entire valve size range: lined ball and globe valves in small and medium sizes as well as lined butterfly valves in medium and large sizes.



Globe · BR 1a/b

Fully lined for corrosive applications with exchangeable PTFE seat and plug. Stem sealing with PTFE bellows and monitoring port to detect primary stem leakage.

Pressures up to: PN 16/Class 150

Sizes up to: DN 200/NPS 8



Micro-flow · BR 6a

Globe valve for very low flow rates, fully lined for corrosive applications with PTFE bellows seals as standard, special material trims available.

Pressures up to: PN 10

Sizes up to: DN 15
(female thread)



Ball · BR 20a

For on/off applications in extremely corrosive media. Two-piece design for easy maintenance with exchangeable PTFE seat rings. Compact design.

Pressures up to: PN 16/Class 150

Sizes up to: DN 200/NPS 8



Diaphragm · KMA 495

Thanks to a PFA lining for smooth internal surfaces, particles cannot adhere easily. Ideal solution for corrosive gases, liquids, fine chemicals and seawater applications.

Pressures up to: 10 bar/150 psi

Sizes up to: DN 50/NPS 2



Butterfly · BR 10a

Optimal solution for aggressive and corrosive media with all wetted parts being PTFE coated. Double-eccentric design to reduce seat wear. Disk can be removed with the shaft for maintenance purposes.

Pressures up to: PN 16/Class 150

Sizes up to: DN 800/NPS 32

ACTUATORS

SAMSON offers pneumatic, electric, electropneumatic and hydraulic actuators for linear and rotary high- and low-pressure valves in all sizes for all applications, including speciality applications, such as cryogenic, food and beverage, severe service.



Pneumatic - Hygienic - 3379

Piston design, linear fail-safe actuator directly integrated with hygienic and aseptic valve bonnets. 3A certified. Suitable for caustic washdown, optionally with integrated Type 3724 Positioner (4 to 20 mA).



Pneumatic - Linear - 3277, 3271

Rolling diaphragm design with integral attachment of valve accessories. Suitable up to 250 mm linear travel with handwheel and travel stop options.



Electric - Linear - 3374

Designed for use in HVAC applications, district heating and cooling networks as well as processing plants. Can be configured to perform specific control tasks. Versions with communication interface are suitable for connection to the SAM DISTRICT ENERGY web portal or a process control system.



Pneumatic - Diaphragm Rotary - R

With a linear travel of 200 mm, this pneumatic diaphragm actuator provides a highly accurate angle of rotation combined with virtually no friction to achieve an incredible hysteresis-free control performance. Available with a maximum torque of 1000 Nm and supply pressure up to 6 bar.



Pneumatic - Rotary - BR 31a

Rack-and-pinion design with limit stops as standard and encapsulated springs for safe and easy maintenance. VDI/VDE 3845 and VDI/VDE 3847 accessories attachment, available in a large range of sizes to economically match torque requirements.

POSITIONERS

With many years of control engineering experience, SAMSON manufactures pneumatic, electropneumatic and smart positioners for all linear and rotary actuator applications, complying with international standards and communication protocols.



Pneumatic · 3766

Pneumatic positioner suitable for single-acting, pneumatic linear or rotary actuators. Suitable for hazardous environments or where no electric input signals are available.



Standard · TROVIS 3730

Smart with non-contact travel sensing, optional limit contacts and feedback transmission. Auto-calibration and auto-tune with LCD and connection to the free TROVIS-VIEW software. Available with HART® communication protocol. Stainless steel and hazardous area versions available.



General Purpose · 3725

Electropneumatic, compact design suitable for linear and rotary actuators. Three touch-sensitive keys and LCD provide intuitive operation with auto-calibration function. Protected non-contact sensor for precise control, UV-resistant housing and attachment options. Hazardous area version available.



Explosion Proof · 3731

Ex d electropneumatic, compact design suitable for linear and rotary actuators. Auto-calibration and auto-tune with LCD and connection to the free TROVIS-VIEW software. Available with HART® and FOUNDATION™ fieldbus communication protocols.



High Capacity · TROVIS 3793

Smart positioner with high air capacity for larger linear or rotary actuators requiring no additional accessories. Auto-calibration and auto-tune with LCD and connection to the free TROVIS-VIEW software. Suitable for single- and double-acting actuators with hazardous area version.

VALVE ACCESSORIES

SAMSON manufactures a wide range of valve accessories for use on SAMSON and third-party control valves.



Supply Pressure Regulator - 4708

Provides constant air supply independent of the upstream pressure with optional set point ranges. Suitable for direct or panel mounting.



Quick Exhaust Valve - 3711

Allows for quick venting/operation of actuators, available in both aluminum and stainless steel housing with integrated restriction to adjust the venting speed.



Solenoid Valve - 3967

Suitable for linear or rotary actuators with a wide range of switching functions. Explosion-proof Type 3966 available.



Signal Converter - 6111

Converts a DC input signal into a pneumatic output signal. Suitable as intermediate element between electric control devices and pneumatic control valves.



Lock-up Valve - 3709

Used to shut off the signal pressure when the air supply falls below an adjusted limit or fails completely. Causes the actuator to fail in place.



Volume Booster - 3755

Designed to increase the positioning speed of actuators for installation between the positioner and actuator.



Signal Converter - 6116

Based on the Type 6111, this i/p converter proportionally converts the electric input signal into a pneumatic output signal but within a certified explosion-proof housing.

DIGITAL SOLUTIONS

SAMSON is taking on the challenges of digitalization. We are working to become the first choice for smart valves and flexible production processes. SAM stands for SAMSON ASSET MANAGEMENT.



Electronic Nameplate: DataMatrix Code

The DataMatrix code on SAMSON control valves provides a unique valve identifier that relates back to the valve build on the SAMSON website.



FOCUS-1

The FOCUS-1 by FOCUS-ON is the first fully integrated multi-parameter flow control and measurement device in the process industry. Thanks to innovative integration of the ultrasonic transducers into its control valve body, it can accurately measure the volumetric flow of liquids.



SAM GUARD®

The SAM GUARD® predictive analytics solution for the process industry quickly and accurately identifies equipment failures and suspicious operating modes days to weeks before an actual failure occurs. It provides an average of five early, accurate and actionable alerts a day.



SAM VALVE MANAGEMENT

SAM VALVE MANAGEMENT is a web-based solution for the smart monitoring and management of control valves installed in process plants. It provides a complete overview of all connected control valves fitted with smart SAMSON positioners.



Digital Positioners

Smart instruments, including communication-enabled positioners in combination with SAM VALVE MANAGEMENT allow for efficient asset management and predictive maintenance of the entire control valve.

SAMSON AT A GLANCE



STAFF

- Worldwide 4,500
- Europe 3,600
- Asia 700
- Americas 200
- Frankfurt am Main, Germany 1,800

INDUSTRIES AND APPLICATIONS

- Chemicals and petrochemicals
- Food and beverages
- Pharmaceuticals and biotechnology
- Oil and gas
- Liquefied Natural Gas (LNG)
- Marine equipment
- Power and energy
- Industrial gases
- Cryogenic applications
- District energy and building automation
- Metallurgy and mining
- Pulp and paper
- Water technology
- Other industries

PRODUCTS

- Valves
- Self-operated regulators
- Actuators
- Positioners and valve accessories
- Signal converters
- Controllers and automation systems
- Sensors and thermostats
- Digital solutions

SALES SITES

- More than 60 subsidiaries
in over 40 countries
- More than 200 representatives

PRODUCTION SITES

- SAMSON Germany, Frankfurt, established in 1916
Total plot and production area: 150,000 m²
- SAMSON France, Lyon, established in 1962
Total plot and production area: 23,400 m²
- SAMSON Turkey, Istanbul, established in 1984
Total plot and production area: 11,100 m²
- SAMSON USA, Baytown, TX, established in 1992
Total plot and production area: 20,000 m²
- SAMSON China, Beijing, established in 1998
Total plot and production area: 47,000 m²
- SAMSON India, Pune district, established in 1999
Total plot and production area: 28,000 m²
- SAMSON AIR TORQUE, Bergamo, Italy
Total plot and production area: 27,000 m²
- SAMSON CERA SYSTEM, Hermsdorf, Germany
Total plot and production area: 14,700 m²
- SAMSON KT-ELEKTRONIK, Berlin, Germany
Total plot and production area: 1,100 m²
- SAMSON LEUSCH, Neuss, Germany
Total plot and production area: 18,400 m²
- SAMSON PFEIFFER, Kempen, Germany
Total plot and production area: 20,300 m²
- SAMSON RINGO, Zaragoza, Spain
Total plot and production area: 19,000 m²
- SAMSON SED, Bad Rappenau, Germany
Total plot and production area: 10,400 m²
- SAMSON STARLINE, Bergamo, Italy
Total plot and production area: 27,000 m²
- SAMSON VDH PRODUCTS, the Netherlands
Total plot and production area: 12,000 m²
- SAMSON VETEC, Speyer, Germany
Total plot and production area: 27,100 m²

SAMSON AKTIENGESELLSCHAFT

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