



SAIP

energy flow



COMPANY



Energy Flow, since 1977

It was back in 1977 when Giovanni Zanardi founded **SAIP** (Società Accumulatori IdroPneumatici) and since then, a series of numerous market successes and new products have been released in the world of accumulators and pulsation dampers.

Starting from this glorious history of success and Italian entrepreneurship, in December 2018 75% of SAIP was acquired by Siparex, a private equity management company active in France, Italy and Germany, with the precise task of **charting a new course towards the future**, driven by the ambition to lead a historic and important Italian SME to an industrial and managerial level.

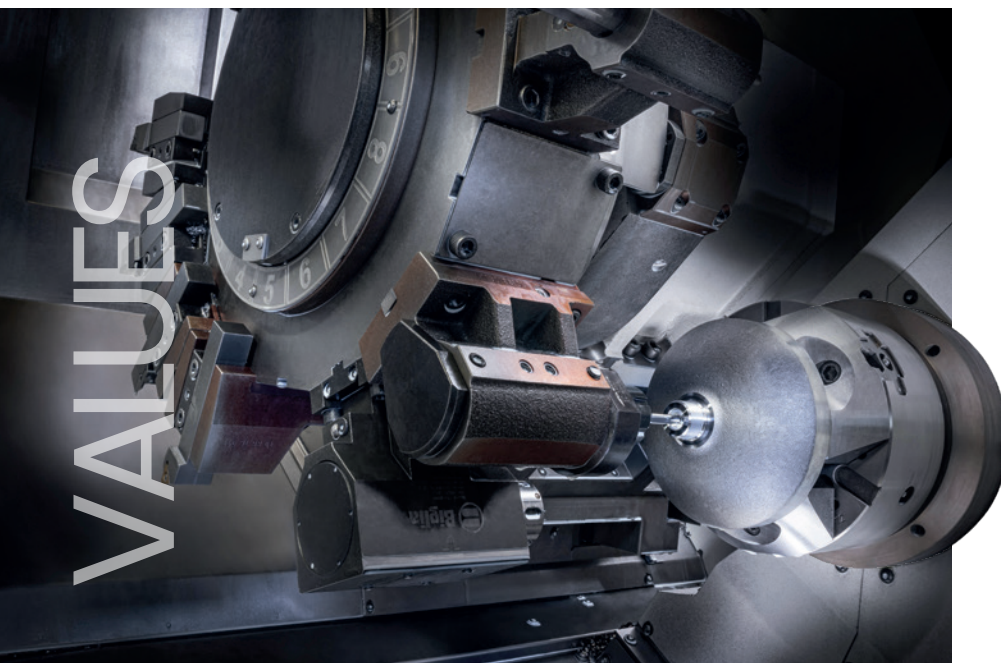
Roberto Renzini
CEO Saip srl





Experience, Preparation, Ethics: our values

In our 50 years of experience we have developed solutions for a variety of application areas: from industrial hydraulics to the mobile vehicle sector; from fluids dosing to the oil & gas, and even to the food and petrochemical sectors.





We strive every day to maintain a stimulating working environment; **we promote continuous training of all staff** because we firmly believe in updating the systems, in the development of skills and professionalism of employees.

We operate in accordance with the management system quality **ISO 9001:2015** to ensure a high standard in business procedures and we have a **Code of Ethics** to affirm our desire to do business in a way fair and sustainable.



Bladder accumulators

We produce bladder accumulators with rubber separator element, durable, for high efficiency and high discharge capacity used in industrial and petroleum applications (e.g. volume compensation in case of variations in pressure and temperature, pulsation damping in the event of periodic oscillations, energy reserve

in case of emergency stop of the plant in emergency situations, such as power failure).

All our bladder accumulators are available in carbon steel, with volumes up to 55 litres and pressures up to 500 bar, which can be certified for various areas and countries of installation.



Bladder accumulators - SI

Repairable bladder accumulator with seamless body in coated carbon steel and with poppet valve.

- Volumes from 1 to 55 litres and pressures up to 360 bar.



Bladder accumulators - LA/LALS

Repairable bladder accumulator with seamless body in coated carbon steel and with plate.

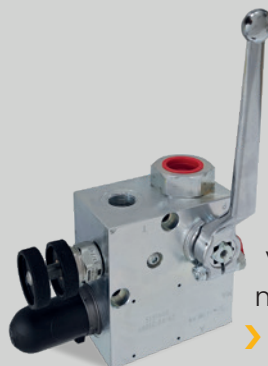
- Volumes from 0,75 to 6 litres and pressures up to 250 bar.
LA 0,75 - 1 - 1,5 lt
LALS 3 - 4 - 6 lt



LAS - high pressure bladder accumulators

Repairable bladder accumulator with seamless body in coated carbon steel and with plate.

- Volumes from 0,75 to 1,5 litres and pressures up to 350 bar.



Safety Block BSF series

Consisting of a galvanised carbon steel body, they are equipped with a PED safety valve, ball shut-off valve and manual or electric drain valve.

- Dimensions from DN 10 up to DN 32

Diaphragm accumulators

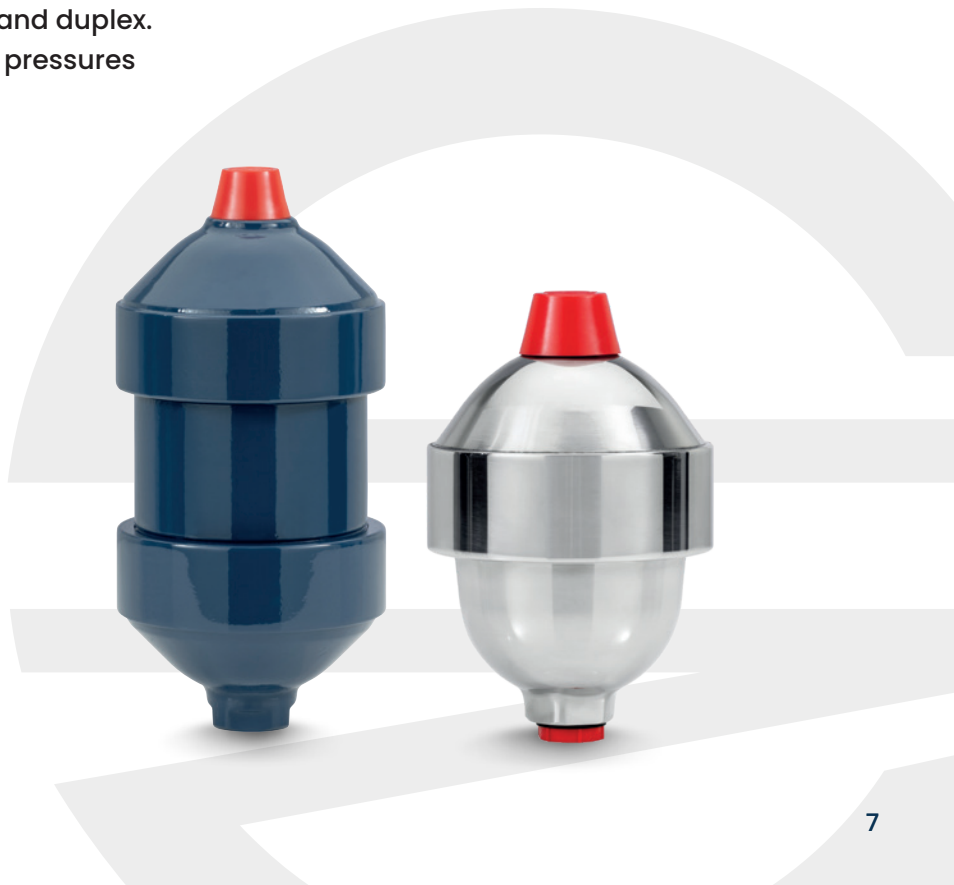
Our repairable and rechargeable diaphragm accumulators with rubber separator element are characterised by their small size, easy maintenance and ease of use.

They are ideal for classic hydraulic applications and available for pressures up to 330 bar, materials down to -40 °C and for installations in extreme environmental conditions.

L - LAV screwed diaphragm accumulators

Repairable and refillable with rubber separator element available in **carbon steel, stainless steel and duplex**.

➤ **Volumes from 0.05 up to 2.5 litres and pressures up to 330 bar.**





Welded diaphragm accumulators

They are economical, compact and lightweight, non-repairable; with carbon steel shells and rubber separator element, electron beam welded and painted. This type of accumulator is used in case of compensation losses due to leakages, vibration damping in the event of periodic oscillations, absorption of collisions in case of mechanical impact, reserve energy in systems with intermittent operation.



Welded diaphragm accumulators WA

Consisting of two high-strength steel caps electron beam welded. The diaphragm, U-shaped, separates the gas side from the fluid side. A special back plate closes the hole of the fluid side when the accumulator is pre-charged to prevent extrusion of the diaphragm.

➤ **Volumes from 0,05 to 3,5 litres and pressures up to 350 bar.**

Piston accumulators

Ideal for high discharge rates and variable pressure applications, **widely configurable in both height and diameter dimensions** in order to adapt to customer requirements and available construction space. They are available in both **carbon steel and stainless steel**.



PAM screwed piston accumulators

Recommended for systems requiring high discharge velocities and high flow rates.

- **Volumes up to 100 litres and pressures up to 360 bar.**



PAW crimped piston accumulators and double chamber crimped PAD

Compact and lightweight construction, are designed for installation on agricultural or industrial vehicles.

- **Volumes up to 4 litres and pressures up to 280 bar.**



Welded piston PAB

Robust, welded piston accumulators, non-repairable and designed for installation in severe operating conditions, where the piston provides greater reliability than the diaphragm.

- **Customisable volumes and pressures.**





Plastic accumulators

Ideally suited for water treatment plants or acid treatment plants, the plastic accumulators are pulsation dampeners for aggressive fluids or alimentary fluids at low pressure with rubber separator element.



Screwed plastic dampers APV

Plastic pulsation dampers with rubber separator element for PVC executions, Polypropylene, CPVC and PVDF.

➤ **Volumes up to 15 litres and pressures up to 10 bar.**



Accumulators on project request

Bladder or diaphragm accumulators with **pressures up to 690 bar**, configurable and available in various materials: stainless steel, duplex, Inconel®, Hastelloy®, titanium. Designed according to construction specifications of the customer and in compliance with strict plans of quality control.



SI bladder Accumulators – Special Series

Repairable bladder accumulator, with seamless body in stainless steel or duplex material, with poppet valve.

- Volumes from 1 to 55 litres and pressures up to 250 bar.



LA bladder Accumulators – Special Series

Repairable bladder accumulator with seamless body in stainless steel or duplex material.

- Volumes from 0.75 to 12 litres and pressures up to 270 bar.



LP-LAVP-LAP high-pressure accumulators

Accumulators with bladder or diaphragm, with customisable construction.

- Volumes up to 10 litres and pressures up to 690 bar.





Hydraulic dampers

Characterised by a rubber separator element, **are suitable for reducing pulsation, water hammer and noise.**

Widely configurable and adaptable to the project specifications, they are available in various materials with volumes calculated on request according to the operating conditions specified by the customer and can be certified for the most different installation areas.



BA hydraulic dampers and additional BAD bottles

These are large accumulators with volumes from 100 to 15,000 litres, used for gas turbine lubrication systems and desalination plants. These accumulators are equipped with additional BAD bottles of up to 75 litres.

➤ **Pressure volumes from 10 to 360 bar.**

Pulsation dampers

Characterised by a membrane or bellows in a variety of materials, they **are dampers designed for applications with any type of liquid or fluid** and for any pressure level. They are also ideal for critical working conditions.



BPL low pressure diaphragm dampers

Made of stainless steel with rubber diaphragm.

- Volumes from 1.5 to 8 litres and pressures up to 30 bar.



Dampers APT – APTD – APTL – APTS – ASP – ASM

Pulsation dampeners with bellows made of PTFE, metal and other materials.

- Volumes from 0.05 to 15 litres and pressures from 10 to 300 bar.
Working temperatures up to 400 °C.



Objective: Quality

All Saip products are submitted to rigorous inspections by recognised international certifying authorities, which attest to their conformity in compliance with the regulations applied in the various countries of destination. Our Quality Management System (QMS) according to the **UNI EN ISO 9001** standard is

customer-oriented, with the aim to promote the continuous improvement of processes, services and products developed by the company. The staff of Saip is engaged against all forms of inefficiency and waste in favour of **sustainability, social responsibility** and **innovation**.



TÜV UNI EN
ISO 9001:2015



National Board



ABSA (CNR)



NOM-20



PED mod. H-H1-G



EAC



AS1210



DOSH



DNV



ASME Stamp



ABS



Lloyd's



RINA



NK





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