



## **SOGEFI at Equip Auto:**

innovations and new products for the vehicles of today and tomorrow.











Leader in the French filtration aftermarket with its PURFLUX brand, SOGEFI could not miss Equip Auto, the Parisian trade fair for innovation aftermarket automotive and connected mobility services, from 18 to 22 October. On the booth, located in Hall 1 Stand H030, the extensive aftermarket offer of the Group's brands will be on display, as well as numerous innovations and new products to ensure the maintenance of the vehicles of today and tomorrow.

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## INCREASINGLY COMPLETE RANGES

In 2022, SOGEFI has maintained its dynamic of new products launch, particularly on the most recent vehicles and on electric vehicles. The company's objective is to make filters available for the aftermarket within months following the vehicle's release.

Over the past nine months, more than 250 new products have been launched, 65 of which in the PURFLUX brand, which now has a total of 1,940 part numbers. Among these new products, cabin filters for the most common electric vehicles are now all available: Tesla Model Y and 3, Fiat 500-E, Peugeot e-208...

The other product families - fuel, oil and engine air - have also been strengthened with the aim of offering a complete range of 4 filters for over 90% of vehicles on the road. The PURFLUX brand now covers more than 95% of the 360 million vehicles in Europe with its 4 product families, making it the brand with the best coverage rate<sup>1</sup>:

Products families	Coverage rate in Europe
Oil	96.7%
Air	94.2%
Diesel	95.4%
Petrol	96.9%
Cabin Air	95.1%

<sup>1</sup> Source: Tecalliance / 2021

All catalogues are available online and on an application that allows a quick and easy search of products:

iOS / Androïd App	Website
PURFLUX	www.purflux.com
FRAM® EUROPE	www.fram-europe.com
TECNOCAR	www.filter-tecnocar.com
COOPERSFIAAM	www.coopersfiaam.com



PURFLUX range

# TECNOCAR: A NEW INTERNATIONAL ALTERNATIVE

SOGEFI Group has a range of famous brands in the Independent Aftermarket: PURFLUX, FRAM®, COOPERFIAAM and TECNOCAR. These brands are aimed at different distribution channels and each enjoys a strong reputation in their respective territories.

The products of the TECNOCAR brand, created in Italy in 1964, have the qualities common to all the SOGEFI Group brands: presence in the original equipment market, access to the Group's patents and innovations. The brand offers a coverage rate of more than 95% for each range of filters produced, including a complete range for light commercial vehicles. It is, therefore, known as «la scelta del professionista» (the professional's choice) in the Italian filter market.

In 2022, TECNOCAR expands internationally and takes advantage of this development to modernise itself. The brand becomes TECNOCAR Filter (instead of «Filtri»), and launches its new packaging from November. The new packaging offers improvements to make the daily life of aftermarket professionals easier:

Labels with a colour code and pictograms for immediate identification of the product family,

A QR code allowing to identify in a few seconds all the applications covered, the cross lists and the dimensions of the product.



This packaging obviously complies with the latest European regulations in terms of recycling, thus facilitating the latter.

The international deployment of TECNOCAR illustrates SOGEFI's will to offer each distributor an ever more complete range of products that meet the needs of each market segment.

# SUCCESSFUL LAUNCH OF CABINHEPA+ CABIN FILTERS



In September 2021, SOGEFI launched a new range of cabin air filters based on HEPA (High Efficiency Particulate Air) media: the CabinHepa+ range. A first for the European aftermarket, filtering virus-sized particles and thus protecting vehicle occupants.

This filter, which is 50 times more protective<sup>2</sup> than a traditional cabin filter, retains up to 99.97% of particles up to 0.3 microns and 99.90% of particles up to 0.1 microns (the size of most viruses)<sup>2</sup>, making it the most effective filter on the market for cleaning cabin air: pollen, dust, debris, allergens, pet dander, mold and many other pollutants, and especially virus-sized particles, are blocked before they can enter the vehicle.

This level of protection has been available to most European motorists since the launch of the range, with 65 filter references covering over 170 million vehicles across Europe, available on the aftermarket under the Purflux® and FRAM® brands. It covers, among others, light commercial vehicles as well as commercial vehicles mainly used in emergency transport (ambulances, fire brigades...).

The launch was particularly successful for this new offer, which was very quickly adopted by the main SOGEFI distributors in Europe, well beyond the initial forecasts.



The CabinHepa+ filter has received the support of consumers, and was voted Product of the Year 2022 in France.

### E-TRAINING FOR EVERYONE!

SOGEFI only conceives innovation as being accompanied by tools that enable the users of its products, both distributors and repairers, to make it their own. In order to enable them to follow the technological evolution of products, SOGEFI offers e-training modules that are particularly appreciated by professionals.

The Filtration e-training modules are now available in 7 languages. During this last quarter, the Swedish, Italian and German versions have been added to the existing offer in English, French, Spanish and Russian.

These modules have been developed by SOGEFI's R&D engineers and product managers, experts in the field of filtration. They offer dynamic training by a professional, supported by videos, technical diagrams and with regular interaction to validate the acquisition of knowledge. They offer a choice of two levels of expertise: Generalist or Expert, with short formats to capture attention and promote memorization.



The platform offers 5 training courses on all the basics of filtration:

- 4 modules per product family: oil, air, cabin and fuel,
- 1 bonus module to discover other types of filtration.

In addition to the training, assembly videos and technical aids are available to further deepen repairers' knowledge of automotive filtration. All these elements can be downloaded.

To register on the platform: https://www.sogefigroup.com/en/etraining.html



## SOGEFIAT THE FOREFRONT OF NEW ELECTRIC & HYDROGEN POWERED MOBILITIES

SOGEFI is a key player in the aftermarket but also the partner of the most demanding manufacturers, distinguishing itself by its numerous innovations in the original equipment market. Among these innovations, battery cooling and fluid management are key functions that ensure the autonomy and reliability of new vehicles.

Five years ago, SOGEFI Group committed in clean and electric mobility products. The challenges of the ecological transition are a source of sustainable growth for the company. It is also an opportunity to deploy on electric, hybrid and hydrogen vehicles, the skills acquired over many years on ICE vehicles.

SOGEFI innovates and develops its expertise mainly in thermal management and ventilation of batteries, distribution, filtration and management of fluids of cooling and hydrogen.

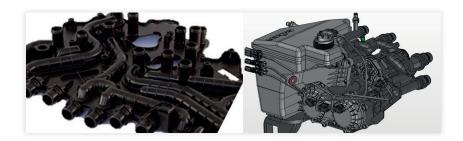
The company thus offers a complete range of solutions for electric vehicles, including:

- Compact coolant distribution modules;
- Cooling plates that meet the various needs of battery pack architectures;
- Battery ventilation systems.

Its strength lies in its Eco-Efficient industrial process which uses laser welding for aluminum, greatly limiting energy consumption and resulting in weight reduction, superior mechanical strength to traditionally manufactured products.

In addition, this year SOGEFI launched a new product range for hydrogen vehicles: **HYDROGEN+**, the result of its expertise in the field of Filtration and Flow Management.

With its original equipment innovations, SOGEFI confirms its strong position as a sustainable and innovative partner for the mobility of the future.



SOGEFI cooling module and pump for electric vehicles

The SOGEFI multi-layer cooling module distributes coolant fluid to electric motors, batteries, power electronics and other cooling components. This solution offers a large number of distribution channels allowing the integration of several connections in a single part. The specific welding technology developed by SOGEFI guarantees a high level of robustness and cleanliness.

The fully integrated cooling module with a modular approach for several applications including water pumps, electric valves, temperature sensors and degassing tank, optimizes the space requirement, routing and overall weight of the function.



SOGEFI electric valves for electric vehicles

The SOGEFI electric valve can contain up to 4 ways. It distributes the coolant in the module or is integrated directly into the vehicle's coolant regulation circuit. Compact design, it can be adapted to the demands of sealing and flow. Its low-friction materials reduce torque.



SOGEFI battery cooling plates for electric vehicles

SOGEFI's extruded or hydroformed laser-welded designs are produced with 97% and 99% lower energy consumption and greenhouse gas emissions respectively compared to traditional brazed solutions. The manufacturing process retains the mechanical properties of the aluminum alloy, opening the door to lighter, stronger cooling plate designs. SOGEFI's cooling plate technologies offer many other advantages:

- an improved delta temperature thanks to a counter-current management solution (alternative direction of flow),
- a large cooling surface area by continuously joined profiles,
- a flexible manufacturing process with low tooling costs.

The SOGEFI hybrid cooling plate, composed of two plates, one in aluminum and the other in composite, offers an alternative to all-aluminum solutions and aims to be lighter and more insulating.



SOGEFI battery ventilation systems for electric vehicles

The SOGEFI solution can combine up to 3 functions in one. It regulates the pressure within the battery pack to avoid internal suppressions, it protects the battery from dust and water, and finally provides high flow emergency degassing in case of cell in the event of a battery cells malfunction.





#### WATER/HYDROGEN SEPARATOR

In order to ensure the life time of the hydrogen circuit and the air compressor, the water must be separated from the circuit in the fuel cell. Based on its experience with various blow-by oil separators and coalescing mesh Diesel 3Tech+ for diesel filters, SOGEFI offers the best combination of efficiency, pressure drop and flow impact.



#### **CATHODE AIR FILTER**

The fuel cell membrane is very sensitive to particles





and specific gases present in the atmosphere. In addition to the particulate filter required to protect the cathode circuit, the SOGEFI cathode air filter protects the fuel cell from harmful gases such as  $SO_2$ ,  $H_2S$ , NOx,  $NH_3$ .



#### **DEIONISER**

The SOGEFI ion exchange filter is made up of a resin housing with very low conductivity and specific beads composed of strong acid cation gel and strong base anion gel which capture the ions in the cooling fluid. It protects the fuel cell from short circuits by keeping the dielectric level of the cooling fluid as low as possible. The SOGEFI solution is compact with an integrated sensor and offers a targeted replacement to the active part of the system to limit the environmental footprint.

### The **HYDROGEN+** range is also a membrane humidifier...

To ensure its good performance and longevity, the fuel cell needs moisture. SOGEFI uses its experience in media and mesh to guarantee an optimal humidity level with a more compact solution and «greener» materials than current humidifying membranes.



Laury Truquet laury.truquet@sogefigroup.com Mobile +33 (0)6 18 77 95 22 Katia Gornès katia.gornes@sogefigroup.com Mobile +33 (0)6 25 27 58 19