

Winterthur, December 19, 2022

Hot topic for electric vehicles: optimized thermal management thanks to new cold chamber

With a new state-of-the-art cold chamber at its headquarters in Winterthur, Switzerland, Autoneum is further expanding its expertise and innovation leadership in vehicle thermal management. The tests and measurements carried out in the chamber enable the Company to optimize existing technologies as well as simulation and engineering services and to adapt them to the changing thermal requirements of electric vehicles. With its tailor-made thermal management systems, Autoneum supports vehicle manufacturers in improving energy efficiency and thus battery performance and reach as well as driver comfort in electric cars.

The absence of heat from the internal combustion engine in electric vehicles as well as the impact of ambient temperature on the performance and lifetime of lithium-ion batteries are changing the requirements for vehicle thermal management. In addition, the energy from the battery is used not only to power the e-motor but also to thermally manage the battery itself and to warm and cool the car cabin by means of the heating, ventilation and air conditioning system. To increase the thermal comfort of the occupants and at the same time ensure optimum battery performance, save energy and thus increase the car's range, manufacturers are placing increasing emphasis on efficient overall thermal management of the vehicle. Thanks to the new cold chamber, Autoneum is now able to test, evaluate and optimize products and future innovation opportunities for optimizing the thermal management of e-cars even more efficiently.

The chamber enables Autoneum to test both occupants' subjective perception of thermal comfort and the performance of components and entire vehicles under controlled temperature conditions of up to minus 20 degrees Celsius. It is thus a valuable addition to the existing testing and benchmarking facilities at the Company's global research and development centers. The tests conducted in the chamber show how existing insulating components such as under battery shields, carpets and interior trim need to be optimized to further enhance the thermal management of the vehicle battery and cabin. The tests also provide valuable insights regarding the development and optimization of heated surfaces such as floor mats and door trim panels to improve thermal performance and driver comfort of electric vehicles.

Combined with Autoneum's long-standing expertise in vehicle thermal management and its innovative products, specially developed simulation software and its unique engineering tools and measurement systems, the new state-of-the-art test facility enables the Company to support its customers even more comprehensively in addressing and mastering challenges in thermal management of electric vehicles today and in the future.

Photos:

Images can be downloaded at: www.autoneum.com/images/thermal-chamber.

For further information, please contact:

Investors and Financial Analysts

Bernhard Weber
Head Financial Services & IR
T +41 52 244 82 07
investor@autoneum.com

Media

Claudia Güntert
Head Corporate Communications
T +41 52 244 83 88
media.inquiry@autoneum.com

About Autoneum

Autoneum is globally leading in acoustic and thermal management for vehicles. The Company develops and produces multifunctional, lightweight components and systems for interior floor and engine bay as well as the underbody. Customers include almost all automobile manufacturers in Europe, North & South America, Asia and Africa. Autoneum operates 53 production facilities and employs around 11 720 people in 24 countries. The Company with its headquarters in Winterthur, Switzerland, is listed on the SIX Swiss Exchange (ticker symbol AUTN).

www.autoneum.com

Autoneum. Mastering sound and heat.