

SEAT invests more than 30 million euros in a pioneering southern Europe powertrain test centre

- The facilities feature nine multi-energy benches that enable any type of engine to be tested, from the development phase to their homologation
- From the Caucasus to Death Valley, in Martorell: a climatic chamber simulates extreme situations, with temperatures between -40 and +65 degrees and up to 5,000 m of altitude
- 200 people test several Volkswagen Group brands 24 hours a day at the facility located in SEAT's Technical Centre

Martorell, 26/11/2020. As part of its constant commitment to innovation and to the future of the company, focused on electrification, SEAT has invested more than 30 million euros in recent years to create the most advanced powertrain test centre in southern Europe. The facilities are equipped with nine multi-energy test benches, which enable different types of tests to be carried out on internal combustion, electric, hybrid and CNG engines, with the aim of ensuring that they meet the quality, CO₂ and other emissions, durability and performance requirements committed to throughout their life cycle.

The investment has been made over the last 5 years and has resulted in a centre with the capacity to carry out 14,300 engine tests per year, from an early stage of development to the tests that will be required for their subsequent approval. The facilities also include a climatic chamber, capable of simulating extreme driving conditions, between -40 and +65 degrees and up to an altitude of 5,000 metres, and an automated tower with a capacity for 27 vehicles, which keeps them at a stable temperature of 23 degrees to ensure that they are in optimum condition for testing.

200 people work in this Powertrain Development Centre, located in the Technical Centre, in 3 daily shifts, 24 hours a day, 6 days a week. They carry out tests that enable them to release new engine projects for different brands of the Volkswagen Group.

SEAT Vice-president for R&D Dr. Werner Tietz emphasised that **“this project consolidates SEAT’s position as one of the most advanced vehicle development facilities in Europe. The new engine facilities and the high technical competence of the teams enable new engines to be tested and calibrated during their development phase to ensure optimal performance for SEAT and CUPRA, as well as the different brands of the Group, with a special focus on hybrid and electric engines.”**

State-of-the-art facilities

The Powertrain Development Center is equipped with nine engine benches, on which their capacities are tested and calibrated according to the type of vehicle on which the engine is to be mounted. Thus, during the development phase, aspects such as fuel injection, intake or power are

adjusted, and extreme driving simulations are made to observe the response of the engines in extraordinary situations.

In addition, the facilities have an emissions laboratory that performs more than 80 different types of tests on each vehicle, as a pre-release stage and in accordance with the approval requirements of the various global regulations. They are also equipped with PEMS devices, the portable emissions measurement system capable of monitoring vehicle running data and which is used to perform the RDE (real driving emissions) tests currently required to analyse the consumption and emissions of cars in real driving situations, as part of the homologation processes.

The powertrain centre also has a durability test bench, where prototypes and vehicles run up to 200,000 km on the rolling road, without any breaks, while engine performance is analysed at all times. In addition, SEAT has installed a system that recovers the energy generated by the rollers and returns it in the form of electricity for later consumption.

From the Caucasus to Death Valley, without leaving Martorell

One of the most unique facilities in the powertrain test centre is the climatic chamber, where extreme temperatures and atmospheric pressures are simulated, moving from the conditions of the Caucasus Mountains to those of California's Death Valley in a matter of hours. In this way, the chamber makes it possible to test the performance of the engines and simulate driving, assisted by robots, in extreme conditions. With these simulations, it is possible to analyse how vehicles with different engines respond to these conditions, in order to guarantee the performance of the cars that will eventually reach customers.

In addition to this Engine Development Centre, and as a step forward in its commitment to electrification, SEAT has also begun to build the future Test Center Energy (TCE) in Martorell, the carmaker's new battery lab. The new centre, which requires an investment of more than 7 million euros, will develop and test various energy systems for electric and hybrid vehicles. The construction of the TCE is included in the 5 billion euro investment plan announced by the company and is scheduled for completion in April 2021. The 1,500 square metre facility will include different test areas for the validation of lithium-ion technology cell modules, medium and high voltage batteries, and different chargers used in the entire range of electrified vehicles.

SEAT is the only company that designs, develops, manufactures and markets cars in Spain. A member of the Volkswagen Group, the multinational has its headquarters in Martorell (Barcelona), sells vehicles under the SEAT and CUPRA brands, while SEAT MÓ covers urban mobility products and solutions. SEAT exports 81% of its vehicles, and is present in more than 75 countries. In 2019, SEAT sold 574,100 cars, posted a profit after tax of 346 million euros and a record turnover of more than 11 billion euros.

SEAT employs over 15,000 professionals and has three production centres – Barcelona, El Prat de Llobregat and Martorell, where it manufactures the Ibiza, Arona and Leon. Additionally, the company produces the Ateca in the Czech Republic, the Tarraco in Germany, the Alhambra in Portugal and the Mii electric, SEAT's first 100% electric car, in Slovakia. These plants are joined by SEAT:CODE, the software development centre located in Barcelona.

SEAT will invest 5 billion euros through to 2025 in R&D projects for vehicle development, specially to electrify the range, and to equipment and facilities. The company aims to make Martorell a zero carbon footprint plant by 2050.

SEAT Communications



Cristina Vall-Llosada
Head of Global Corporate Communications
M/ +34 646 295 296
cristina.vall-llsada@seat.es



María José Aguilar
Corporate Communications
M/ +34 681 270 021
maria-jose.aguilar@seat.es



SEAT Mediacenter