



## PRESS RELEASE

### **PIRELLI CONTINUES TO INVEST IN GERMANY WITH THE OPENING OF ITS DRIVING SIMULATOR AT THE VIRTUAL DEVELOPMENT CENTER**

#### **ARTIFICIAL INTELLIGENCE AND NEURAL NETWORKS PERMIT TO SAVE DEVELOPING TIME UP TO 30% AND SAVE THE SAME AMOUNT OF PHYSICAL PROTOTYPES**

*Breuberg, 2023 December 14th.* Pirelli is marking a new significant milestone in tyre development with the opening of the Virtual Development Center (VDC) at its Breuberg site in Hesse, which employs around 2,500 people, including 250 development engineers. The VDC, a new step in Pirelli's growth in Germany, enables the premium tyre manufacturer to develop and test its products virtually. This progress results in considerable advantages for Pirelli and its OEM customers in the automotive industry. Tyre development time is reduced by up to 30 percent, and the tyre manufacturer also has to produce up to 30 per cent fewer physical prototypes. This not only saves time and money. The company is also making a significant contribution to sustainable production. Pirelli has set itself the goal of achieving CO<sub>2</sub>-neutral production by 2030. Furthermore, the driving simulator, as part of the virtual tire development process, allows Pirelli to achieve increasingly more precise results than traditional methods. A way to provide answers that are increasingly in line with the requests of car manufacturers.

"In our VDC, we can develop tyres for cars that don't yet exist in reality, but which are provided to us by car manufacturers in the form of digital models," explains Thomas Michel, Chief Technological Officer at Pirelli Germany. Artificial intelligence (AI) and neural networks play an important role in this innovative tyre development. This is because they speed up the development of virtual tyre models enormously. What used to take hours or even days is now often completed in just a few seconds. It's a sort of a virtual tyre factory."

Pirelli engineers can enter virtual versions of all vehicle models provided by the car manufacturers into the simulator. Test drives then begin with the virtual tyre models. The engineers see how the vehicle behaviour is affected or should be affected by steering, acceleration, and braking interventions on the virtual vehicle. "The VDC, including the simulator, supports all virtual project phases for German car manufacturers," emphasises Florian Waffenschmidt, Head of VDC. "We virtually test tyres for combustion engines as well as our tyres with Elect technology for electric cars and plug-in hybrids."

With the Virtual Development Centre and its static driving simulator, Pirelli underlines its role as an innovation leader in the tyre industry at its German site. The combination of high-tech simulation, artificial intelligence, and expert engineering paves the way for Pirelli to enter a new era of mobility.



## **About Pirelli**

Founded in 1872, Pirelli is one of the world's leading tyre manufacturers. It is the only dedicated consumer tyre company, offering tyres and related services for cars, motorcycles, and bicycles. Pirelli has a clear positioning in the field of high-quality tyres, characterised by advanced technology and more than 3,900 homologations thanks to partnerships with the most prestigious car manufacturers in the world. To achieve the highest levels of performance, safety and environmental compatibility, Pirelli has always been strongly committed to research and development, in which the company will invest around 5.5% of its premium product sales in 2022.