

Challenge

Making Fuel Cells safe for a CO₂-neutral environment of tomorrow

Fuel Cell technology is a key contributor to the clean, CO₂ free, mobility of future. Fuel cells find their application in passenger cars, trucks, buses, railways and marine solutions, as well as in stationary power and heat generation. Scaling up of production and of hydrogen fueling infrastructure as well as further improvements in the technology in terms of efficiency, life-time and safety are currently in the development focus. One of the key aspect is the safety of the Fuel Cell, leakage of H₂ is there the key challenge. The goal of this project is the development of an innovative concept for leakage testing of fuel cell systems to be applied in the production, means in the final quality inspection.

Industry Partner



With 11,000 employees worldwide, AVL is the world's largest independent company for the development, simulation and testing of powertrain systems (hybrid, combustion engine, transmission, electric drive, batteries, fuel cell and control technology) for passenger cars, commercial vehicles, construction, large engines and their integration into the vehicle.

Mission

Concept for a novel leakage testing device of fuel cell stacks and systems

- evaluate and define measurement principles and check its feasibility
- ensure necessary accuracy and reliability of the testing system
- support fast installation of the leakage tester and the fuel cell

