

# Fiditas and Kambič

## Kambič – Equipment for Precise Environmental Testing

Kambič is a family-owned company with over 40 years of tradition in the development, production, assembly, and testing of sophisticated laboratory and process equipment.

Our products, solutions, and services are present in all industrial sectors that rely on applications with precise control of temperature, relative humidity, pressure, vacuum, or gas concentrations (N<sub>2</sub>, O<sub>2</sub>).

Our team of specialized development engineers, test engineers, and skilled assemblers enthusiastically tackle new challenges and the evolving demands of the market, primarily in the field of test equipment and demanding process applications.

The team is complemented by over 50 external partners and representatives in more than 40 countries worldwide

### PARTNERSHIP IN TESTING HAZARDOUS AREA EQUIPMENT

Fiditas specializes in explosion safety and compliance for equipment used in hazardous areas. The company provides ATEX and IECEx testing and certification services, supporting manufacturers in ensuring product safety in explosive atmospheres.

Its activities include laboratory testing of electrical and non-electrical equipment, risk assessments, and technical training. Fiditas supports clients across industries such as oil and gas, petrochemicals, energy, mining, wood processing, the food industry and the pharmaceutical industry.

The first Kambič climate chamber was installed in 2022. Following positive operational experience, Fiditas recently invested in a second unit to further expand its in-house testing capacity.



### ENVIRONMENTAL TESTING IN SUPPORT OF EXPLOSION SAFETY

Equipment intended for use in explosive atmospheres must maintain its safety performance under demanding environmental conditions. Extreme temperatures, high humidity, and long-term thermal stress can significantly influence material properties, sealing systems, and overall device reliability, which is why environmental testing is a critical part of validation.

Standard tests include exposure to temperatures up to 160 °C and down to –65 °C, as well as combined temperature and humidity testing at 90 °C and 95 % RH. In addition, long-duration conditioning tests of four to five weeks are used to evaluate ageing effects and long-term stability under continuous stress conditions.

Testing is performed on both complete devices and individual components, depending on the verification level required, in line with ATEX and IECEx standards and the expected operating conditions in real applications.

## PARTNERSHIP AND TECHNICAL SUPPORT

Reliable laboratory equipment is essential for organizations performing testing and certification activities. Environmental chambers used in such environments must provide stable operating conditions, repeatable performance, and long-term reliability, especially when running extended tests that may last several weeks.

At Fiditas, Kambič climate chambers are integrated into daily laboratory operations, supporting a wide range of environmental tests required for the evaluation of equipment intended for hazardous areas. The chambers are frequently used for demanding test conditions involving elevated temperatures, high humidity levels, and long-duration exposure tests.

In addition to the equipment itself, close technical cooperation between the two companies plays an important role. Technical support, responsiveness, and the ability to adapt solutions to specific laboratory needs contribute to efficient testing workflows and reliable long-term operation.

The continued investment in a second Kambič climate chamber reflects the positive experience with the equipment and the trust built through the collaboration. This partnership enables Fiditas to further expand its environmental testing capabilities while maintaining the high level of reliability required for testing equipment used in explosive atmospheres.



## TRUST, EXPERTISE, AND RELIABILITY

The collaboration between Fiditas and Kambič demonstrates how specialized testing laboratories and manufacturers of environmental testing equipment can work together to support demanding technical requirements. In fields such as explosion safety, where reliability and precision are critical, stable and repeatable testing conditions form an essential part of the evaluation process.

Through the use of advanced environmental testing equipment, Fiditas is able to perform demanding laboratory tests required for the assessment of equipment intended for operation in hazardous areas. Reliable climate chambers enable accurate simulation of environmental conditions, supporting both testing activities and certification processes.

The cooperation between the two companies is built on technical expertise, mutual trust, and a shared commitment to quality. As testing requirements continue to evolve, this partnership provides a stable foundation for further development of reliable environmental testing solutions for equipment used in explosive atmospheres.