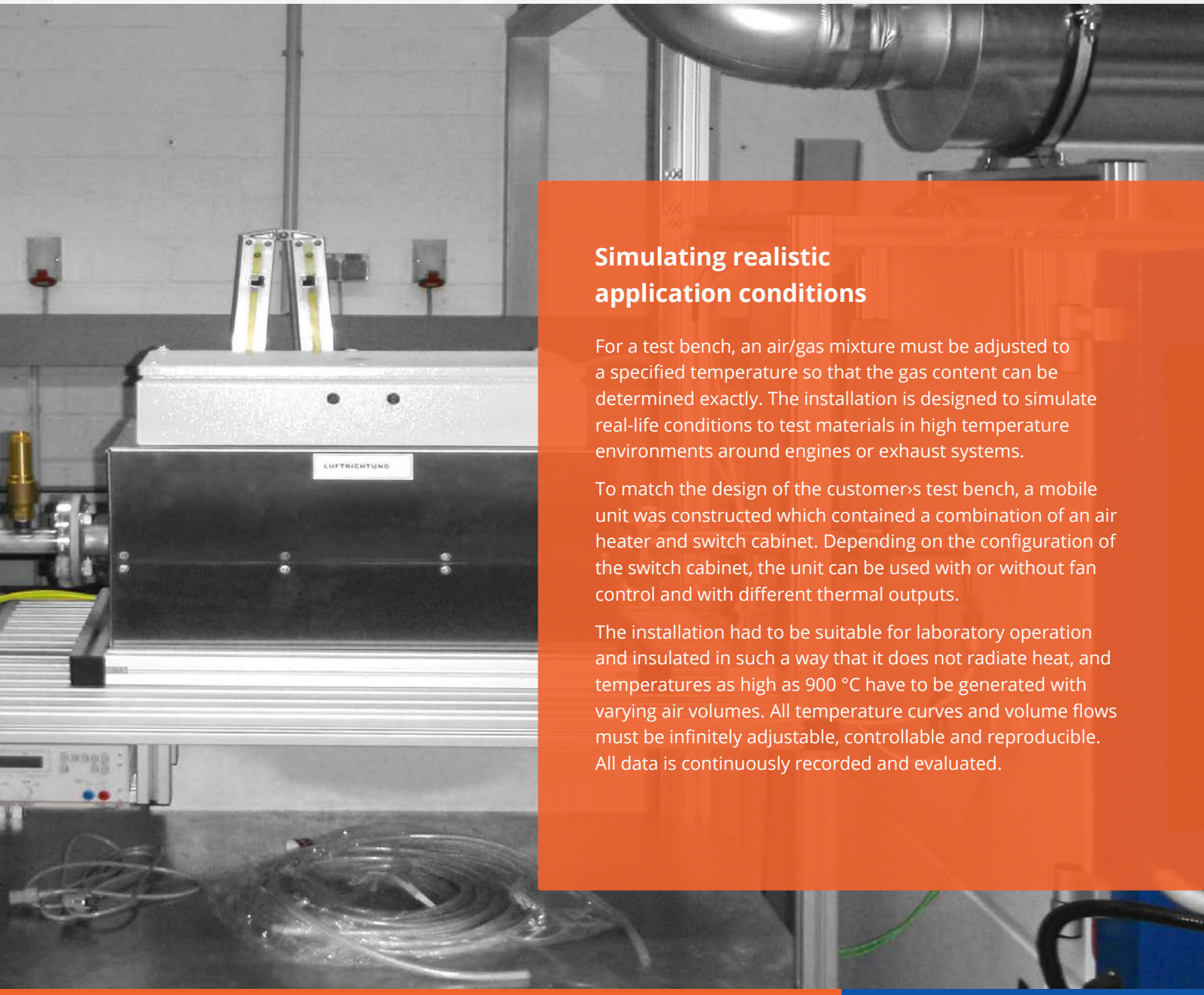
HAPRO
Thermodynamic Engineering.
Product Line of WiTec Elektrotechnik GmbH

Case study: **Test facility for temperatures up to 900 °C**



Simulating realistic application conditions

For a test bench, an air/gas mixture must be adjusted to a specified temperature so that the gas content can be determined exactly. The installation is designed to simulate real-life conditions to test materials in high temperature environments around engines or exhaust systems.

To match the design of the customer›s test bench, a mobile unit was constructed which contained a combination of an air heater and switch cabinet. Depending on the configuration of the switch cabinet, the unit can be used with or without fan control and with different thermal outputs.

The installation had to be suitable for laboratory operation and insulated in such a way that it does not radiate heat, and temperatures as high as 900 °C have to be generated with varying air volumes. All temperature curves and volume flows must be infinitely adjustable, controllable and reproducible. All data is continuously recorded and evaluated.

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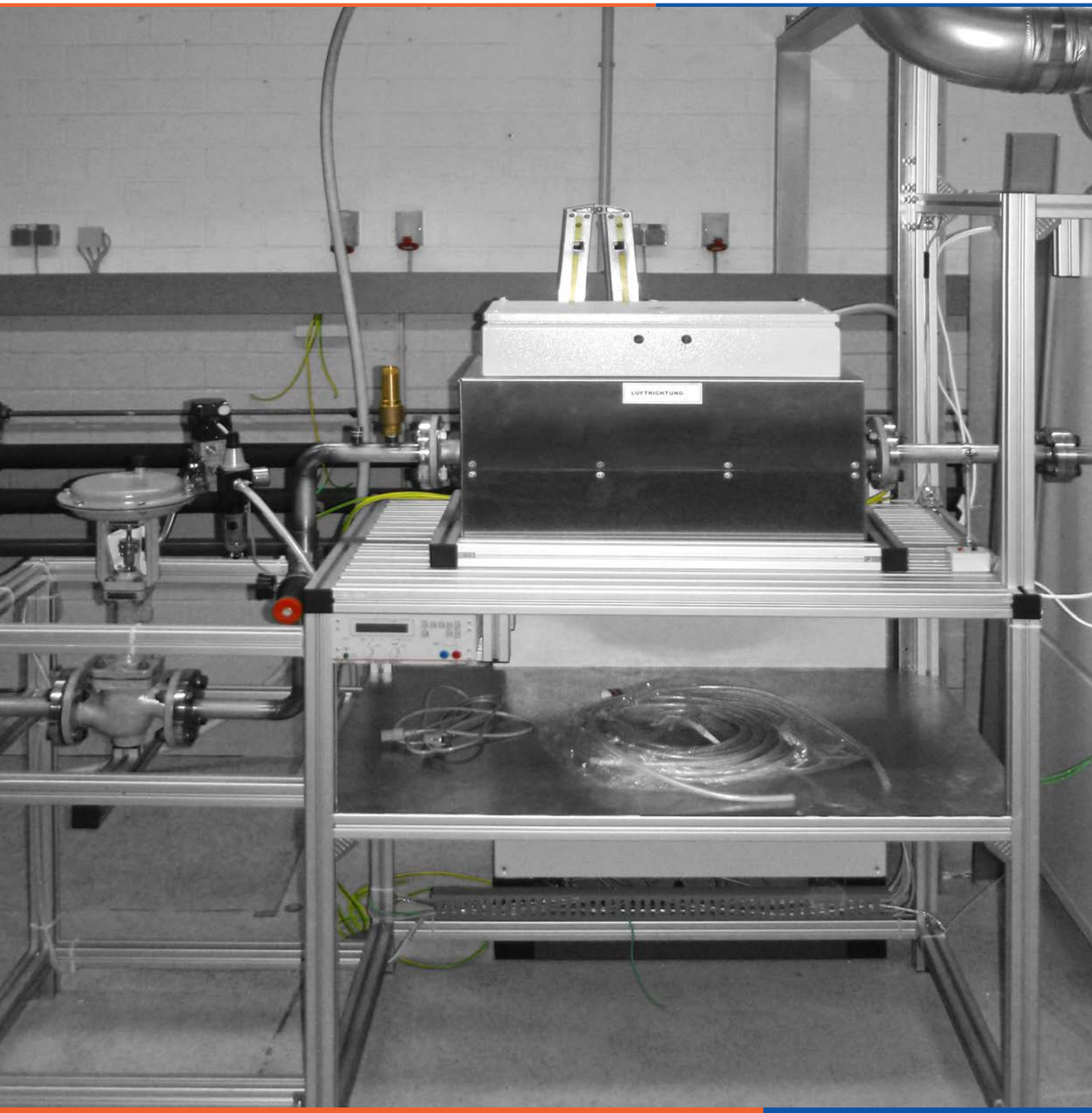

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Case study:

Test facility for temperatures up to 900 °C

Simulating realistic application conditions

Technical data of the installation

Base frame

Aluminium profiles on feet

Parts

Multi-stage air heater with special heating coils
High pressure blower
Temperature-dependent air volume measurement
PLC

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