

TEST BENCH TECHNOLOGY

Flexibility is our trump card

Elster-Instromet not only offers customers a wide range of products for measuring and controlling the pressure of gas, but also test benches and systems for servicing and adjustment work at our customers' sites.

We have the field of test bench technology for gas pressure regulators fully covered and can offer you a whole range of technical equipment. This extends from manual test benches with a fixed installed testing line to fully automatic test benches with interchangeable testing lines for various nominal sizes.



Flow rate check

New test bench with flexible testing lines up to 2"

Naturally a wide range of combinations, such as a manual test bench with the facility of producing electronic test reports, are also possible. In addition, control convenience can be improved in a whole host of stages, such as the use of pneumatic actuators for the manual valves.

You the customer decide on the design and equipment on the test bench since every model is designed and built in bespoke form to meet your requirements. Your national regulations, in which the nominal sizes, the position of the pressure tapping points, etc. are defined, provide the technical framework for designing the test benches.

The following functions of gas pressure regulators are among those that can be tested on these test benches:

- > Setting the required outlet pressure for the corresponding inlet pressure and flow rate
- > Lock-up pressure test (internal tightness)
- > Testing the control properties



LP test bench: Everything is fully automated here.

- > Testing and adjusting the upper/lower trip-off point of the safety shut-off valve
- > Flow and function of the low pressure cut-off (LPCO)

We generally build the frame for the test benches from aluminium sections on which the interchangeable testing line is then installed.

The inlet pressure is controlled either infinitely by a pilot controller or pre-set pressures for frequently used test points can be provided, which can be activated easily using a selector switch.

The flow rate is generally measured by electronic means. A so-called laminar flow element is used for low flow rates, while ultrasonic gas meters are used for higher flow rates.

Both types of measuring instruments feature a certain level of insensitivity to dirt, which is particularly beneficial for testing equipment that has been in use in a network for a lengthy period of time. The flow rate is controlled infinitely and precisely using an IRIS diaphragm control valve. This can also be used for pre-setting purposes if you wish to test several units using the same flow rate.

If we have attracted your interest for a test bench for gas pressure regulators, we would be delighted to carry out your planning and engineering work. Please ask us for an individual quotation.

Jürgen Schedler

j.schedler@elster-instromet.com