

Projects – The Best Solutions Come from Listening



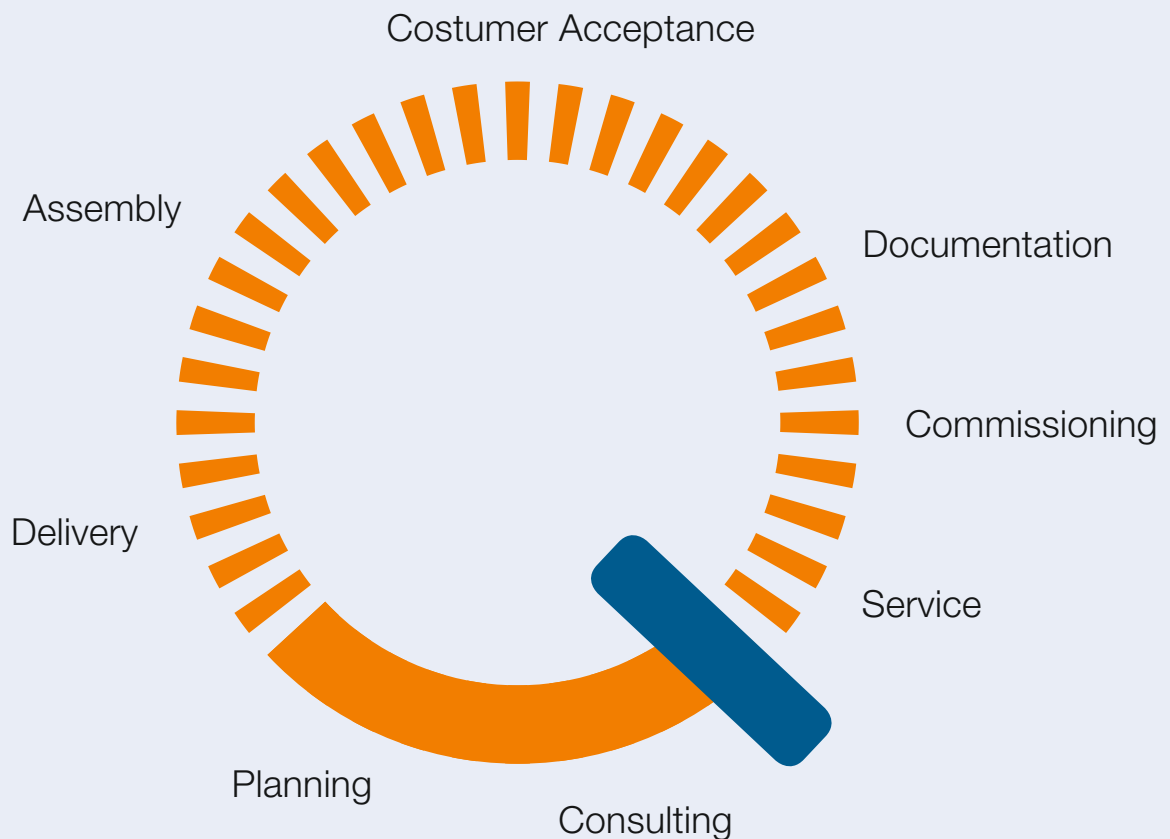
Prime Partner
in Hydrogen
and Gas Analytics

Projects – The Best Solutions Come from Listening

At meterQ we aim to satisfy each and every one of our customers. To achieve this, we take the time to look at all the requirements and talk to the customer, and above all: listen to him. We register general requirements as well as requests that deviate from the standard order. Many projects are 90% standard.

Yet, we will also implement the missing 10%, for which new ideas and innovative solutions are needed.

Our goal is always 100% – 100% satisfied customers.



What Kind of Projects We Implement

We are experts in projects with measurement technology around natural gas and H₂. The scale ranges from pure natural gas over any natural gas/H₂-mixtures to pure H₂. We do everything from small modernizations or conversions of existing plants to more complex retrofits and complete measurement containers or plants.

On the gas side, everything starts with the sampling (probe), via the supply line, pressure reduction/sample preparation, via the measuring devices to the blowers. Of course, meters also belong to this category.

On the electrical side, we hook-up the measuring device, provide cabling, Ex barriers, an associated data processing unit, volume corrector and the control cabinet as an interface to existing electronic customer infrastructure. If desired, WIFI is also possible.

Everything is Possible! ...

... this is our motto at meterQ, be it a special requirement within a project, or be it the solution for a unique task.

There are many examples:

- a special sample collector for the analysis of long-chain hydrocarbons,
- a mobile measuring system as trailer or movable container,
- an individually adapted gas supply unit
- a laboratory rack to operate an MGQ^{flex} in the laboratory

The decisive factor for us is what the customer needs and not what we already have in the drawer. Our engagement does not stop at simple engineering, we also look for and offer solutions for more fundamental problems.

The requirement that is heard most often from customers, is the request to reduce emissions in the context of gas analysis. This concerns the measuring device itself and the associated bypass. We have developed a whole arsenal of possibilities to drastically reduce the bypass emissions of measuring systems and thus to protect both the environment (greenhouse gas!) and the purse (waste of gas) of our customers.

The possibilities range from computational design to a special extraction system that make the use of a bypass unnecessary, to the conversion and optimization of existing measurement systems.

Finally, if a project is too large in terms of requirements or scope to be tackled alone, we have reliable and experienced partners, who can also handle large projects.



Individually adapted mobile gas supply unit

Where Others Give Up, We Continue

Our claim, which we take very seriously, is to advise each customer objectively and in the best possible way. We want satisfied customers. We respect the wishes of our customers, even if products of our competitors should be specified in a project.

We don't reject a project because it is too small or because we can't pull all the pieces right out of the drawer. We find a solution, even if a customer comes to us with an open problem.



Consulting: Competent and Individual

We advise our customers in various areas and solve the problem when other companies have already given up.

We Will Find Your Solution!

We listen to the customer to understand the problem. In the next step, we work together with the customer to find a solution that is both technically and economically optimal. We accompany the customer from the offer to the implemented solution of the problem. Proven solutions and components of the customer are integrated as well as new products which are available on the international market.

Some Examples from Our Practice

Underground Sampling

The task in this case was to continuously sample natural gas from a gas pipeline 3 m below ground. The key problem was that the probe had to be extendable under operating pressure, as the pipeline must be cleaned from time to time. Here **meterQ** was able to find a special probe in the international market and thus provide the solution. These systems have now been successfully in operation for years.



Low to High Calorific Value Gas Conversion

The task here was to measure the calorific value of the natural gas as quickly as possible in order to adjust the calorific value to the desired target value. **meterQ** developed two systems here: one is a stationary system and the other is a mobile system. Both systems have a T90 time of <math><15</math> seconds.



High Pressure Test Facility for Gas Meters in Germany and Internationally

Meter-Q Solutions GmbH has led the conceptual design and also the realization of the test facilities in several projects in Germany and abroad.



Emission Reduction

We give you a satisfying answer to the question of how to reduce or completely avoid gas emission of your gas analysis installation via the bypass!



First, we can calculate the actual measurement delay of your installation based on the bypass setting, so that you have a realistic decision base for the setting.

After this first step, we propose a concept on how to optimize the existing installation to further reduce the emission through the bypass without having to accept a larger measurement delay.

In many cases, using the **MGC^{direct}** can even make the bypass completely unnecessary and reduce this emission to zero. Of course, everything said applies not only to natural gas, but also to hydrogen.

Tenders

In addition to the execution of projects, **Meter-Q Solutions GmbH** can assist in or prepare tender documents for metrological tasks.



Market Analyses

Another field of activity of **Meter-Q Solutions GmbH** are customer-specific market analyses for metrological tasks in the natural gas and hydrogen sector. No task is too complex for **meterQ**. If you have any problems in the field of metrology, please do not hesitate to contact us!



Assembly

Our employees are experts for gas pressure control and measuring systems in network operation and in industry (DVGW worksheets G 491, G 459-2, G 492, G 495 and DIN EN 746 Part 2).

Thus, in addition to placing the components (high-pressure reducer, gas supply unit, etc.), our employees can install the piping between the components, such as the installation of a sampling probe and the data connection/cabling.

Following the installation, cold as well as hot commissioning including signal check is carried out by **meterQ**.



Service and Maintenance

meterQ's product solutions always are low maintenance. Should service be necessary, however, most problems can be solved via remote connection or assistance, thus minimizing travel and service time on site and the associated costs.

The **MGC^{flex}** is characterized by a very service-friendly modular design. The GC plug-in module (GC measuring unit) of the **MGC^{flex}** can be replaced in just under an hour, in contrast to other PGCs (whose conversion usually takes 1 to 2 days). After installation the GC is immediately ready for use again.



Mobile Gas Quality Measurement: Flexible and Mobile

The system for mobile gas quality measurement is officially approved for natural gas and biogas measurement.

The application of the **MGC^{flex}** for hydrogen as custody transfer measurement is in preparation.

For non-custody transfer measurements, the **MGC^{mobile}** can already be used to determine the calorific value of hydrogen and its impurities.

For temporary use of the **MGC^{mobile}**, be it for monitoring a calorific value reconstruction system in transport networks or for calorific value tracking in distribution networks, or even as an emergency replacement system, you can rent the **MGC^{mobile}**.

Please contact us for details.





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