



THE ONE-SOURCE REVOLUTION

We speak to Jörg Erens and Thorsten Reisinger from Perfect Sample Gas about where the company has come from, why they see their gas sampling solutions as unique and what the future holds for the company.

In gas analysis, reliable results begin long before the analyser – with the correct extraction, transport, and conditioning of the sample gas. For Perfect Sample Gas (PSG), this principle extends far beyond stack sampling alone. Whether extracted directly from the process or from the stack, the critical challenge is to preserve the integrity of the gas from the point of extraction through transport and conditioning, right up to the moment of analysis.

We spoke with the managing directors of PSG about their evolution from a specialised component manufacturer into a global provider of integrated gas sampling solutions – and how their holistic focus on sampling, transport, and sample conditioning ensures truly representative measurements.

IET: To start, let's talk about the PSG solution. You often refer to three main components. Could you break those down for us?

Jörg Erens (JE): Our solutions are built on three technical pillars. First, we have the gas sampling probes. This is the point of extraction – where we pull the gas from the process or the stack. Second, we have the transportation, which is handled by our heated sample lines. Keeping the gas at a specific temperature is vital to prevent condensation or chemical changes during transit. Finally, we have the sample conditioning systems. This usually involves high-quality gas coolers to prepare the gas for the analyser.

IET: What was the motivation behind bringing all these components under one roof?

JE: It was a very specific vision. We wanted to become the only company in the market manufacturing all three components from a single source.

We already have deep knowledge in probes and heated lines. But in 2016, we acquired AGT Thermotechnik. This must be described in more detail. With the amendment of AGT in 2026 PSG got complete and had a complete portfolio covering the interests of Emissions Monitoring and industrial customers. AGT were a niche, high-quality provider of gas coolers. That acquisition is where the name "AGT" comes from. Looking back over the last 10 years, it was clearly the right decision.



Thorsten Reisinger, Managing Director AGT-PSG GmbH

JE: We see it in the new regulations. It's no longer just about the analyser; it's about the "measurement package."

If you have a poor sample handling system, you simply won't pass modern quality certifications like QAL1.

For a long time, sample handling was overlooked.

But a study by one of the major leading OEMs in 2017 really changed the conversation. They found that 80% of mistakes or problems in these types of measurements are not caused by the analyser device itself, but by the sample handling system.

We take a lot of pride in that statistic because it proves our relevancy. No matter how advanced an analyser is, it cannot "heal" a bad sample. If the chemistry of the gas changes in the line, the data is wrong.

We are an engineering company first. Others might say: "Here is our product, take it or leave it." We look for customised, engineered solutions. If a customer has a specific demand for an OEM application, we build it.

IET: Measurement limits are tighter than ever. How is that impacting your engineering?

Thorsten Reisinger (TR): Limits only know one direction: down.

As the regulatory thresholds for pollutants decrease, the accuracy of the sample preparation system must increase proportionally.

We see two distinct paths for the next decade.

In the power and emission monitoring industry, we see a rising demand for energy driven by things like massive server farms. These facilities need reliable monitoring.

On the other hand, the process industry is looking to improve efficiency. They want more data for modelling, digital twins and AI systems.

But without high-quality physical data, those AI models are useless.

That is why process analysis demand is growing – especially for European industries looking to remain competitive globally.

IET: Customers always want lower costs, but they also have sustainability targets to meet. How do you balance those two competing needs?

JE: Reducing costs is one thing, but we can do it through innovation.

For instance, we've developed heated sample lines that have significantly lower energy demand.

At a power plant, you might have enough electricity to run anything. But companies are now looking at the CO₂ footprint of the monitoring system itself. They are putting "green fingerprints" on their labels.

Moving away from high-power consumption elements to energy-efficient components is a major shift in the industry conversation. It's not just about the money anymore; it's about the environment.



IET: What differentiates PSG from more established, larger competitors in this space?

TR: We go the extra mile to be more innovative.

In the last few years, we've released more new products to the market than almost anyone.

Our new factory allows us to produce super energy-efficient products that simply didn't exist before.

But beyond the hardware, it's about partnership. We don't see customers as just "buyers."

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We look for customised, engineered solutions. If a customer has a specific demand for an OEM application, we build it.

We've been doing this for 50 years. So, while we are innovative, we aren't exactly the "new kids on the block."

IET: Looking ahead, what is the next frontier for the company?

JE: Internationalisation is huge for us.

We are already strong in Europe and Asia, but we are pushing hard into the Middle East, the US, and the Canadian markets.

We need to be more transparent and present on the global stage.

We are also focusing on specialised packages for ATEX or IECEx areas. We see more and more measurements performed in explosive or dangerous environments.

Our ability to provide, for example, a 100-metre heated sample line with a single heating circuit is quite unique.

It reinforces that "one-stop shop" identity.

We don't just provide products; we provide a complete, engineered solution.

For more information about Perfect Sample Gas visit www.perfectsamplegas.de



Jörg Erens, Managing Director AGT-PSG GmbH