

SAMCON & PEDAK - A Great Cooperation



Figure 1:
New solutions for exact
temperature measurement in
hazardous areas.

Temperature Measurement for Critical Environments

PEDAK meettechnik's core competence lies in measurement technology whereas SAMCON is an expert in explosion protection. Together, this is a perfect match when it comes to using temperature as an analyzing tool in hazardous environments. „We were looking for a company with an expertise in measurement technology as well as in machine vision and automation. All of these requirements are met by PEDAK“, says Steffen Seibert, CEO at SAMCON. “We have just launched two new thermal measuring cameras, which are installed in small ex-d housings“, he adds, “so that SAMCON can now offer a very compact temperature measurement solution for hazardous areas. It was therefore important to us finding a partner with whom we can combine our know-how and expertise regarding explosion protection and their expertise in the field of temperature measurement. And this led to this new cooperation between PEDAK and SAMCON.”

What makes temperature measurement interesting

The ExCam XI80/410 is a measuring IR camera which uses an IR detector and a high quality lens. It combines the advantages of a pyrometer (infrared thermometer) with those of an IR camera, measuring the temperature without contact. Physically, the pyrometer is based on the evaluation of the electromagnetic radiation emitted by the measurement object, which is proportional to the object's temperature. The electromagnetic radiation is focused by the input optics and converted into an electrical signal by a corresponding infrared detector. The advantages are:

- extreme quick measurement,
- long, continuous measuring ranges,

- no influences on the measuring object,
- measurement of moving objects,
- measurement at high voltages and in aggressive media etc.

Commonalities and what the companies distinguish

What might strike first is that both companies have the same size and, more importantly, they share the same philosophy: Solving the customers' problems and finding the best solution – this is the main objective of both companies. What they distinguish, though, is their know-how and expertise. And this is the exact reason why this cooperation was a logical consequence as their individual expertise and experience complements each other.

About PEDAK meettechnik

The company was founded in 1975 and is located in Heythuysen, in the Netherlands. PEDAK meettechnik does not only offer the tools for temperature measurement but has also a broad knowledge and a great deal of experience in this very particular technical field. Their strength is to find solutions for customers in many different sectors and to optimize the applicable processes. Maaïke Godschalk, responsible for infrared measurement, particularly for optris devices, has seen a lot of applications in the last 6 1/2 years during which she has been working at PEDAK and has gathered a lot of experience with special applications. Through the years, she gained expertise in the area of temperature measurement.

Maaïke Godschalk

Specialist Infrared Temperature



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„One of my main goals, every time again and again, is not only finding any solution for our customers but to find the best that is available. Solving their problems, helping them to optimize their process, the way of working and showing them that measuring with an IR-camera is a very good addition to their process or to the figures they want to gain from their process, this is what motivates me. For some customers, using a measuring IR camera is a whole new experience so it is important to also demonstrate that the delivered results – although you cannot “see” them – are accurate”, Maaïke Godschalk adds.

A solution for hazardous areas

With the two very small thermal cameras ExCam XI80 and ExCam XI410, we have a very compact device for the hazardous area which we can introduce to the market. Maaïke Godschalk: „I enjoy looking for new solutions. And SAMCON's ex-d housing is the perfect addition to IR-measurement in an explosion risk area. I am convinced that customers will be surprised about the size but also about the housing design. It is lean and mean and that is unique.”

A beneficial cooperation

PEDAK and SAMCON agree: „Both companies have the common goal to meet customer's requirements and needs as well as to find the best solution possible.” „For us, the main goal is always to select the most suitable device for our customer's application. In combination with the perfect automation solution, we can now offer a complete package to customers”, says Steffen Seibert. „PEDAK knows the market and is also opting for the best solution to solve the particular problems their customers face. SAMCON can help in this regard by providing the best device for the application”, he adds. „We are experts for hazardous areas and can flexibly adapt to our customers' wishes in case their needs differ from our standard. Our product has two unique features”, says Steffen Seibert. „Unique concerning the size; it happens that thermography imaging cameras are installed in 45 kg enclosure with huge Germanium glass lenses. And then it needs to be determined whether they have analyzing capabilities or if they just giving you a thermal image. Our camera is very compact and small and it contains various analyzing functions.” Both, Steffen and Maaïke, agree that there is a good opportunity to start into a new market with these small explosion-proof spot-finder thermographic cameras because until now, there was no solution on the market with a small process camera getting in touch with the process. „These small devices simply did not exist and to have a 20 cm process sight glass monitored by a thermal camera which is 40 cm in diameter was not a feasible option. Our product fills the gap offering new applications for this kind of process monitoring,” says Steffen Seibert.

About SAMCON

SAMCON Prozessleittechnik GmbH was founded in 1992 and is located in Lohra-Altenvers, near Marburg. SAMCON produces high quality camera systems for explosion risk and hazardous areas (2014/34/EU ATEX). SAMCON solves problems that occur in hazardous areas since 2006 with an enormous range of cameras. CCTV applications range from simple monitoring applications to fully controllable digital video monitoring systems with voice transmission.

Steffen Seibert

Specialist Cameras for Hazardous Areas



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