



## Carbogen AG, Aarau: laboratory control by Sauter in practice

**In the very sensitive field of laboratory and clean-room ventilation, customer feedback is crucial. A laboratory does not work for itself, but for its in general very demanding customers. These require highly precise laboratory results. Sauter Facts wanted to know what the**

**company Carbogen, Aarau, thought of its Sauter laboratory management system and the environment it creates. Facts interviewed Carbogen manager of infrastructure, ventilation and production facilities Mr Fridolin Kühne.**

**Facts:** Mr Kühne, please tell us a bit more about Carbogen?

**Mr Kühne:** Contrary to what might seem the case judging from our name, we do not work with genes. We focus entirely on carbon chemistry. At present we have some 130 employees, most of which are chemists and laboratory technicians. Between 30% and 40% hold university degrees in chemistry.

**Facts:** Your company has grown very fast, not so?

**Mr Kühne:** Yes, 4 and a half years ago



only 36 people were working with us here in Aarau. Today we have additional sites in Hunzenschwil, where there are 80 employees, and in the vicinity of Fribourg where we have 50 to 60 employees.

**Facts:** How did Carbogen get into contact with Sauter?

**Mr Kühne:** Former Luwa ventilation engineers who set up their own business introduced us to Sauter in the course of an invitation for tenders. Sauter installed our first basic ventilation system back in 1995.

**Facts:** What exactly did Sauter supply you with?

**Mr Kühne:** In the start-up project phase Sauter equipped the new rooms on the third and fourth floors with an appropriate control system. During the second phase Sauter connected the first and second floor to the new control system of the upper floors. It was the company Astra that directed us to you, saying that Sauter's control system for clean rooms was the best on the market.

**Facts:** Did Carbogen opt for our electronic or pneumatic control system?

**Mr Kühne:** The pneumatic system was best for our circumstances, in particular owing to its level of operating safety, which is higher than that of your very sensitive electronics system. For us the most important issue is employee and product safety. Pneumatic room control is advisable in such cases as it performs best on both counts: products are protected thanks to the stability of environmental conditions, and the technicians are protected when handling hazardous products. If today we had to choose again, we would

again go for the Sauter system.

**Facts:** Was Carbogen happy with installation and implementation too?

**Mr Kühne:** Yes, since installation about 18 months ago we have had absolutely no technical problems. Commissioning of the system also went off without any hitches.

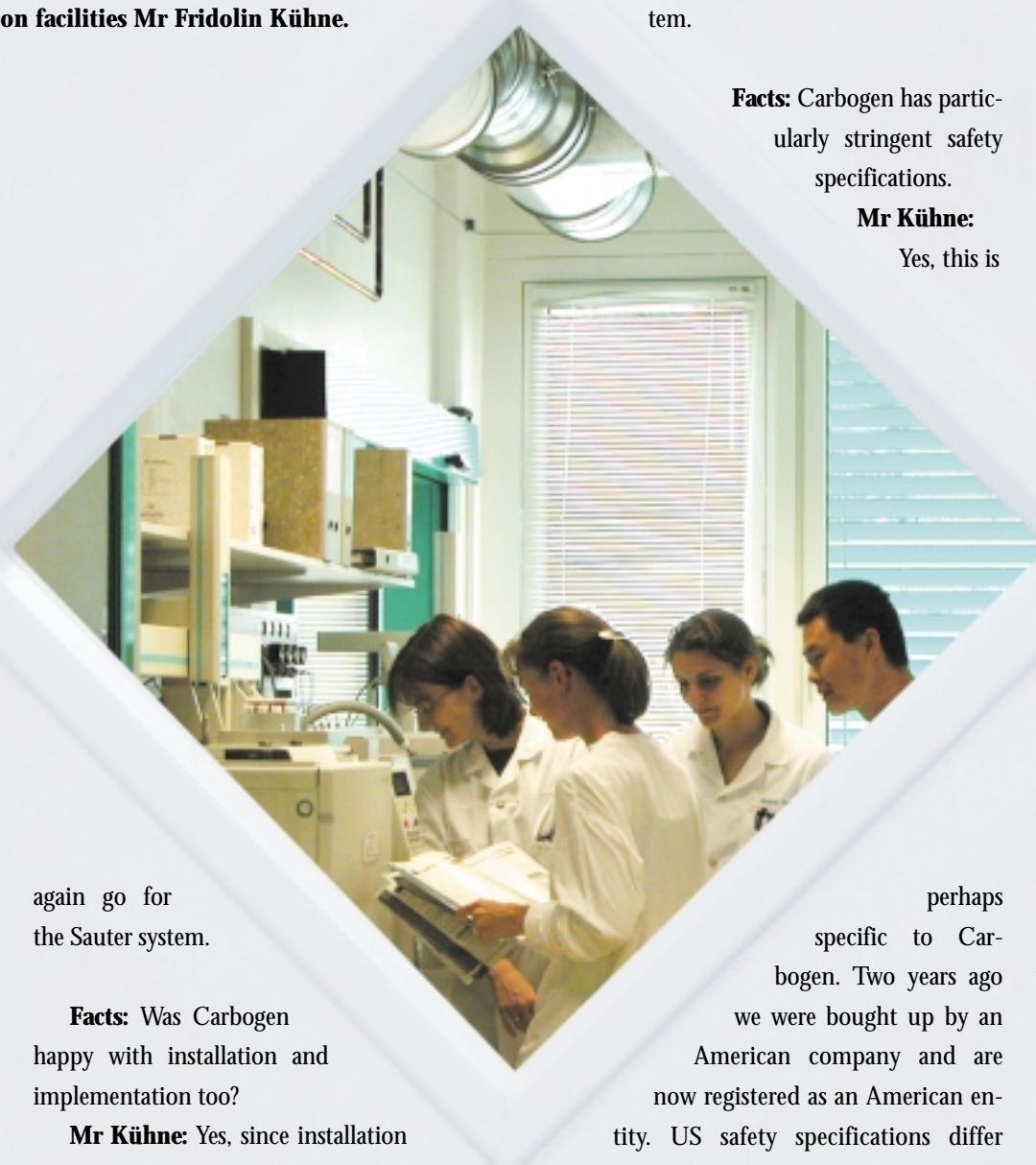
**Facts:** What role did our system documentation play?

**Mr Kühne:** You know, technical documentation must provide clear information on all of the main settings. Sauter's documentation was most helpful in this

respect. It enabled us to make all the settings required for smooth and safe operating and properly operate the entire system.

**Facts:** Carbogen has particularly stringent safety specifications.

**Mr Kühne:** Yes, this is



perhaps specific to Carbogen. Two years ago we were bought up by an American company and are now registered as an American entity. US safety specifications differ somewhat from Swiss ones. This raised a few questions during an American audit. But we proved that we meet all European conditions, so there were no real problems.

**Facts:** And how about overall system costs?

**Mr Kühne:** To be honest, Sauter's was not the cheapest of tenders. But aspects such as co-operation, safety and reliability

were more important to us than direct costs.

**Facts:** Let's go back to the planning stage for a moment. Can you tell us more about the planning processes and division of roles at that stage?

**Mr Kühne:** The first we had to do in the planning stages was to make a division between 1) control and 2) monitoring, and the higher control systems. As I mentioned earlier on, we chose a pneumatic system to ensure control of safety aspects.

For the second phase we now have to choose a separate monitoring system capable of ensuring overall monitoring. Here we are thinking of giving an electronic system a go. But we haven't decided yet. As for planning, obviously the services rendered by the provider are crucial. We ourselves mostly did draft planning. But for detail planning we needed planning offices and specialists like Sauter. It is very important that the parties involved in such projects trust in each other's competence; which we can say was the case.

**Facts:** And how about trust in the products?

**Mr Kühne:** Well, product trust is the Alpha and Omega of any choice of a system. 75% of our customers are American, and you know how it goes with product maintenance and suing for damages in that country. So, to avoid unpleasant surprises in this field we need to produce patent results in line with very clear conditions all the time.

**Facts:** Which is also why you introduced regular internal controls, isn't it?



**Mr Kühne:** Sure. Unfortunately we still have a few weak spots to overcome with our annual controls. But we are working on them. For example, we are systematising training of laboratory operations, which includes basic handling of the control systems.

**Facts:** How important is regular testing for Carbogen? Is it a mere formality, or do you see testing as something that could have practical consequences?

**Mr Kühne:** For us regular testing is of utmost importance! It is a way of protecting ourselves against the right of recourse if something goes wrong at a processor or with a user. If we can prove that our production conditions were correct, then our hands are clean! And with Sauter we are sure that this will continue to be the case.

**Facts:** Thank you very much, Mr Kühne, for granting us this interview.

rolf.schulze@ch.sauter-bc.com