STG and Siemens: successful partnership for the glass industry

## Stable, Long-Term Relationship

The efficient use of resources and optimization of the production plants dictate today's automation requirements for the glass industry. STG GmbH in Cottbus has equipped and optimized a large number of glass production plants using technology from Siemens and has been a Siemens automation technology partner for years. Both companies benefit from this partnership, as Dr. Peter Hemmann, one of the managing directors and founders of STG, stresses.

Dr. Hemmann, STG GmbH was one of the first companies to settle in Cottbus at the time it was founded.

**Peter Hemmann:** That's right – we are the fifth entry in the Cottbus trade register. It really took a great deal of courage and pioneering spirit when Helmut Heelemann, Frank Hegewald (who died much too early), and myself founded STG in the spring of 1990 just after the wall came down.

But success has proved us right: as an innovative, technology-oriented company we have been on a course of growth ever since. This success is based on the methods of  $NO_x$  reduction that we had already developed before the reunification of Germany

and that we have further optimized at STG. The zirconium oxide measuring probes for oxygen, which work reliably in harsh environments with extremely high temperatures, have evolved from this. With this product we are virtually without competition worldwide.

STG GmbH is now an established enterprise. Where are your strengths?

Peter Hemmann: We employ more than 40 people and are located on the premises of a former mill in Cottbus, which gives us enough room to find creative and innovative solutions for our customers' problems such as models and methods for saving

energy and reducing  $\mathrm{NO_x}$  emissions, optimum process control, and specific use of sensors in the heating of industrial furnaces. Although we are traditionally at home in the glass industry, we also develop individual solutions for metallurgy and ceramics. We take on all tasks relating to the repair and construction of new glass plants, from conception through engineering right up to commissioning and service.

A lot has changed in control technology since 1990. How do you cope with the constantly changing demands?

**Peter Hemmann:** We have worked in very close cooperation with Siemens since our

## **STG GmbH Cottbus**

STG GmbH was founded in the spring of 1990 as an innovative, technology-oriented engineering company. Its now more than 40 employees have since created solutions for energy saving and the reduction of NO<sub>x</sub> emissions, and for optimum process control, sensor technology, and the heating of industrial furnaces. The production sites in the Grosse Mühle Madlow, a 100-year-old historical building that STG has renovated, offer generous room for efficient engineering and the development of creative technological solutions.





The two directors of STG, production manager Helmut Heelemann and managing director Peter Hemmann, are proud of their company's success. This success is due in large part to NO<sub>x</sub> reduction using zirconium oxide oxygen measuring probes that work reliably in harsh environments with extremely high temperatures

founding and are therefore always up to date with technological developments. We have equipped more than 50 plants with Siemens technology in Europe, America, and Asia. The first success was the equipping of the glassworks in Döbern, in which the Teleperm M control system was used. In 1995, we and Siemens sales made our first contacts with floatglass plants. Today we have more than 30 references in this field. Stable and long-term relationships are the basis for satisfied customers who gain significant benefits from the technology – for example, through optimized processes.

How do you find exactly the right solutions for your customers' problems? **Peter Hemmann:** The most important prerequisite to finding optimum solutions and satisfying customers is understanding the process requirements down to the last detail. We have a process engineering background, and therefore automation is first and foremost an aid for optimum process control. Besides, the partnership with Siemens and our project experience give us a detailed knowledge of the capabilities of the control system that you won't find in any manual. Both of these factors create a robust, low-cost, and ultimately future-safe solution. Sophisticated redundancy concepts, for example, increase plant availability. This leads in turn to the greatest possible production throughput and to higher sales for the glass manufacturer at the end of the day. The use of fieldbus technology allows significant savings in the area of wiring and creates possibilities for preemptive management of the installed assets.

We are essentially the relay in a winwin situation from which all those involved ultimately draw advantages: our customers benefit from the large network of an internationally active automation technology manufacturer and from the product improvements resulting from feedback from the different applications, and Siemens gets detailed feedback on the performance of Siemens products in glass production processes.

Since you work for customers from all over the world, you probably also have to cope with a large number of national regulations and laws.

**Peter Hemmann:** That's true. It's not always easy to identify and satisfy the relevant regulations. We try to understand our customer's wishes and the special requirements of the respective country in intensive meetings. We offer the necessary tools and

methods and have the appropriate equipment to ensure that our customers are ultimately able to gain success in the eyes of the law as well.

You have achieved a great deal with your company, STG. What is your personal vision for the years to come?

Peter Hemmann: You know, the wonderful thing about technology, also automation technology, is the continuous progress and the new challenges that it reveals – for example, new modeling techniques for automation with which system engineering can be improved. Or the use of video technologies and evaluation of the pictures to get clear evidence of the process behavior. Personally, I want to create and put my own dreams into practice so that I, and my colleagues here, continue to develop.

Dr. Hemmann, thank you for speaking with us.

More information: www.siemens.com/glass/partner