

We reveal all about our new burner holders

Since being subject to tighter emission restrictions, burner holders have come under increased scrutiny from the glass-manufacturing industry. Our all-new adjustable burner holders make it easier for companies to comply with more stringent emission regulations. Patented, industry-leading and available in two guises (WSH and WSM), our original burner holders feature an easy adjustable vertical axis, and mostly cross compatibility with burners from other manufacturers.

To find out more, we carried out a Q&A with SORG's Marketing Manager, Dr. Hartmut Hegeler, who explained what makes this unique innovation the best, and how it works.

Why were the SORG WSH & WSM burner holders developed?

"Firstly, because adjustable burner holders with fixed pivot points weren't available, and secondly, burner holders generally have three disadvantages. The pivot point isn't in the centre of the burner nozzle, so it moves when the horizontal and vertical burner angle needs to be adjusted. Or, if one direction is adjusted, the burner height needs altering until its horizontal and vertical axes are correctly positioned, or until the burner is at the right height. Also, various tools and measuring equipment are required when adjusting burner angles, and the process is long and complicated, in a very hot and unhealthy environment."

What was the research & development process of the burner holders?

"We began by analysing our own burner holders, as well as those from other companies, before holding discussions with SORG staff members and our customers furnace operators. We then started developing a solution and carried out a field test, the result of which were used to improve the burner holder. It was then granted a European patent, and US patent is pending."

What are the differences between the WSH and WSM burner holders?

"WSH-type burner holders have a vertical axis that can be adjusted by hand, while WSM-type burner holders have a vertical axis that is adjusted by a motor."

What are the key benefits of the SORG burners over others?

"The burner holder's fixed pivot point means no readjustment of the burner is needed, no tools and no measuring equipment are required for adjustment, while all operations are controlled by knobs and locking bolts. Also, the WSM burner holders can be operated from the furnace control room by watching the emission values by an analyzer and the flames on the furnace monitor. Control strategies then become available ("industry 4.0"), and the burner can be adjusted automatically by the control system."

What makes SORG's burner holders easy to set up?

"No tools or measuring equipment are needed and, once the horizontal axis is aligned and the burner's height is adjusted, only the vertical axis needs to be adjusted. After the vertical axis is changed, the burner holder's height can stay the same because of its stationary pivot point."

What are the burner holders made from?

"SORG's burner holders are made from strong and rigid heat resistant materials. We don't compromise here!"

How can you meet with the burner holders ever-increasing restrictions on furnace emissions?

"As emissions regulations became stricter, especially the legislation surrounding NOx, we had to address the efficiency of burner holders. Different operating conditions, like a higher or lower throughput of heating medium, meant adjusting of the vertical axis to ensure the perfect mixture with combustion air during the combustion process, which has a direct influence on emissions."

"Before SORG created these adjustable burner holders, furnace operators had to use equipment in the burner aisle to change the burner's position. This was a long and hard procedure: the new burner holder makes the job faster, easier, and more reproducible."

Which furnaces can WSH & WSM burner holders be fitted to?

"Our burner holders can be fitted to a variety of SORG burners for oil and gas, regardless of whether they're side-fired or end-port furnaces. You could fit our burner holders to burners from other manufacturers, but it must be checked whether they're compatible first."