

AGC Ceramics Initiates Support Services Utilizing Digital Technology for Efficiency Enhancement of Glass Bottle Melting Furnace

Tokyo, September 25, 2024— AGC Ceramics (Headquarters: Tokyo, President: Masaru Ota) a group company of AGC (Headquarters: Tokyo, President: Yoshinori Hirai), will officially launch a comprehensive total solution that covers the design and engineering of container glass melting furnaces, refractory material sales, and operational support. AGC Ceramics provides consulting services to maintain the performance of glass melting furnaces at a high level, using the glass manufacturing know-how and digital technology accumulated by AGC, and supports stable operations as well as GHG emissions reduction.



Remote control room for monitoring furnace conditions

The life cycle of a container glass melting furnace is about 10 years, and during this time, there is a decrease in fuel efficiency due to deterioration of the furnace, and a deterioration in yield due to fluctuations in operating conditions. In order to continue operating efficiently, it is necessary to understand the daily operating conditions and respond to any issues that arise. In addition, in the container glass manufacturing process, the temperature inside the furnace needs to be raised to approximately 1,500°C to melt the raw materials, and there is a large amount of GHG emissions, so responding to carbon neutrality is an urgent issue.

AGC Ceramics provides advisory services necessary for stable operations throughout the life cycle of container glass furnaces, based on AGC's advanced digital technology and expertise in glass manufacturing. By using sensors and cameras to remotely monitor the condition of the customer's furnace and analyzing the information stored on a digital platform, we can make appropriate improvement proposals before the furnace's fuel efficiency or yield deteriorates. This helps to reduce the customer's manufacturing costs and improve product quality. In addition, we can support technological innovation to help customers achieve carbon neutrality by utilizing AGC's knowledge of GHG reduction in glass manufacturing.

In its medium-term management plan, [***AGC plus-2026***](#), the AGC Group has set out to "Promotion of value creation DX". By integrating AGC's strength in manufacturing capabilities and the digital technology accumulated thus far, we will drive business model transformation and provide our customers with unprecedented new value.

<Media inquiries>

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<Reference Information>

Examples of GHG reduction technology development in AGC's glass manufacturing

• [World's First Demonstration Test of Glass Production Using Ammonia as Fuel in Actual Production Furnace](#) | [News](#) | [AGC](#)

• [AGC Achieves Success in Demonstration Test of Glass Production Using Hydrogen as Fuel](#) | [News](#) | [AGC](#)

AGC's DX technology

• [AGC Develops Digital Twin Technology for Glass Melting Process and Begins Operational Verification in Float Furnaces](#) | [News](#) | [AGC](#)

About the AGC Group

AGC Inc.(Headquarters: Tokyo, President & CEO: Yoshinori Hirai) is the parent company of the AGC Group, a world-leading glass solution provider and supplier of flat, automotive and display glass, chemicals, ceramics and other high-tech materials and components. Based on more than a century of technical innovation, the AGC Group has developed a wide range of cutting-edge products. The AGC Group employs some 56,000 people worldwide and generates annual sales of approximately 1.7 trillion Japanese yen through business in about 30 countries. For more information, please visit www.agc.com/en

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