

HRASTNIK 1860

Partner Interview



Mateja Koritnik
Melting and Batching Manager in
Steklarna



Could you tell us a bit about yourself and what are your daily activities as a melting and batching manager at Steklarna Hrastnik?

I've been working in Steklarna Hrastnik for 27 years. I'm part of our technical team and I'm responsible for the batch house processes and glass melting. This includes managing the quality control of our raw materials in our analytical laboratory, batch and oxide composition of our glass, batch mixing process, monitoring the glass melting process in our furnaces to always ensure the best energy-efficiency and glass quality for our customers.

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Could you tell us about your role in the H2GLASS project?

In my current role as the Melting and Batching Manager at Steklarna, I continue to be actively involved in the ongoing H2GLASS project. I am involved in both the preparation and execution of experiments related to hydrogen utilization in our glass furnaces. Specifically, I am responsible for defining and managing the technological limits of the melting process and glass quality, closely monitoring the impact of hydrogen, and managing any deviations from established parameters. This ensures safe integration of hydrogen into our glass production processes.



As one of the individuals involved in producing the first H2GLASS bottle, could you walk us through the challenges of transitioning your process to H2 combustion?

During the first industrial campaign of the H2GLASS project, I was closely monitoring the impact of hydrogen on the glass melting process and glass quality. Throughout this phase, we observed that the introduction of hydrogen led to a higher formation of NO_x, a slight increase in glass foaming, and seed formation, all of which remained within acceptable limits. The overall outcome was highly satisfactory; we successfully tested up to 100% hydrogen as a fuel on all six burner positions, reaching over 60 vol% of Hydrogen in the total fuel mix required for melting. This translates to a significant reduction of one-third in greenhouse gas combustion emissions. Importantly, this success instills confidence in the feasibility of retrofitting existing furnaces with hydrogen, and we are optimistic about achieving a 100% Hydrogen furnace by 2025.



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Lastly, what advice would you give to young women looking to start a career in the glass manufacturing, based on your own experiences?

I've been working with glass for so many years, but I can still learn and discover its "secrets, chemical and physical processes in the furnace. For me, glass is a magical material and I really love working with it. Every new furnace we build is a new story for us. Currently, we are writing a new chapter in a glassmaking industry by melting glass with hydrogen, but this is just one of the many challenges we have. You can never be bored in the glass industry, you can learn throughout your entire career. It can be stressful and exhausting sometimes, but the satisfaction of a successfully completed project is so much greater.

About HRASTNIK1860



Hrastnik1860 member of Vaider Group, with its two production units located in Hrastnik, Slovenia, and more than 160 years of tradition, is a renowned global partner in the development and manufacturing of world-class engineered glass products. The company is famous for creating technically demanding bottles, primarily in the spirit segment, and offers an extensive range as a full-service solution partner—from R&D and consulting to innovative design, prototyping, manufacturing, decoration, and reliable delivery. Being made of top-quality glass, HRASTNIK1860's products are acclaimed for their perfect crystal shine and are entirely free of heavy metals. These products are distinguished by a combination of style and quality, ranging from traditional designs to innovative, award-winning solutions that have received recognition and won prestigious awards such as the Red Dot Design Award, German Innovation Award, and other design-related honours. Hrastnik has also been honoured with the EcoVadis Gold Medal and Platinum Certificate for its sustainability efforts.