

BergHOFF’s recipe for success: putting ceramic coatings to the test

10 June 2024, 10:08

To this day, PTFE is one of the most popular coatings in cookware, due to its high heat-resistance and hydrophobic properties. However, as we learn more about this ‘forever chemical’ and its negative impact on the environment, manufacturers increasingly look for more sustainable (PFAS-free) alternatives. One of these alternatives is ceramic coating. Together with Sirris, Belgian kitchenware brand BergHOFF put a range of these coatings to the test to compare their quality with those of competitors.

As a leader in high-quality kitchenware, BergHOFF offers a diverse range of cookware and kitchen gadgets for culinary enthusiasts. Its innovative and durable designs are currently sold in over 60 countries and have earned the company multiple prestigious awards, including Red Dot and iF Design.



Accept marketing-cookies to watch this video. For FireFox users, disable the ‘Enhanced tracking protection’ of your browser to view this video.

Cooking up a (test) plan

For this project, BergHOFF selected 10 cooking pans with different ceramic coatings for the test. These coatings are gaining in popularity as a viable, sustainable and healthy (PFAS-free) alternative to PTFE coatings. However, there are many quality levels of ceramic coatings available on the cookware market.

BergHOFF turned to Sirris to set up a comprehensive plan to test each ceramic coating’s limits and ideal use cases and compare them with competing products. The most important advantages of working with Sirris? “Independent expertise, access to top-notch testing infrastructure and equipment, knowledge of coatings and relevant norms and standards, and the ability to flexibly deploy new tests when needed,” says Robby Vanhees, Quality Manager at BergHOFF.

Out of the frying pan

“In a kick-off meeting, we first explored which tests were a must in terms of industry norms, and which could be useful for marketing purposes,” explains lab coordinator Arantxa Penninger. “Based on that information, we drafted a test plan, which included regular updates and reporting to BergHOFF. Finally, we collaborated with BergHOFF’s marketing department to create a project video, which was later used at their trade fair booth.”

The pans and coatings underwent tests for abrasion resistance, corrosion, and performance. Arantxa: “The idea was to simulate the lifespan of a cooking pan in a very short period. So we were constantly adding aggressive products such as salt and brown rice, heating and cooling the pans, washing them with abrasive agents, and even cooking pancakes in them. Our lab was full of cookware, it was quite the sight.”

Based on the results of the test, the pans and their coatings were labeled as:

- suitable for general use, as a valid alternative to PTFE coatings;
- good resistance to impact and abrasion, and a non-stick performance approaching that of PTFE coatings. Although being relatively more resistant to scratches, these pans generally remain vulnerable for scouring pads – just like PTFE coatings.

This allowed BergHOFF to use different coatings depending on the target market and enabled the company to expand its range of sustainable, durable, and innovative products.

Our experts for this innovation project

Arantxa Penninger

Annual Report 2023: Another year of innovation!

In 2023, we didn't just adapt, we innovated and elevated!

From boosting innovation services to diving deep into energy transition and manufacturing, we've been busy. We completed over 1.200 innovation projects and highlighted 13 industrial cases in the annual report. And let's not forget our leap into Generative AI, which is a game-changer.

Unwrap all the details here

Authors