

The CERAN® kitchen rock star turns 50



Look behind the scenes

SCHOTT engineers revolutionized cooking in 1971 with a black glass-ceramic. Originally designed for space applications, the high-tech material has since paved the way for modern kitchen designs and has become a real success with over 180 million glass-ceramic cooktop panels produced to date. And so it continues: Today, the rock star sets new standards for cooking in the future.

Challenge

From outer space to the kitchen

Glass-ceramic is a special material. It is extremely heat resistant, withstands sudden temperature shocks without thermal expansion and is extremely durable. It was initially intended for space applications such as mirror carriers for telescopes. But it is also suitable for civilian applications: innovative cooktops made of glass-ceramic changed the kitchens of the world forever.

Rethinking cooking

- Today, kitchens are the center of life. This has also increased the aesthetic and functional requirements for the modern cooktop. It must be safe and sustainable, fit into the overall concept of the kitchen or function as a design element itself - and preferably also be intelligently networked with other kitchen appliances.

Experience meets high-tech

Many years of research, know-how and the use of the latest technologies make SCHOTT a pioneer in the production of glass-ceramic cooktops. As a result, the international technology group not only sets new standards in the kitchen, but also in the production of the original: CERAN®.

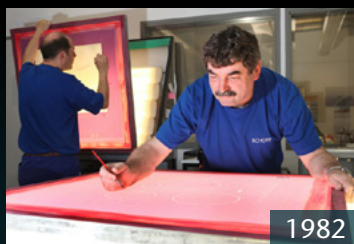
Innovation

Reinvents itself time and again

With the constantly expanding CERAN® product family, SCHOTT is constantly redefining the possibilities of cooking – without creative and technological limitations and with the highest quality standards. For example, the scratch-resistant CERAN Miradur® coating maintains the beauty of the cooktop for longer. The light permeable glass-ceramic from the CERAN EXCITE® portfolio enables innovative and smart lighting solutions.



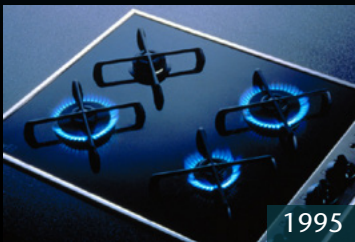
Start of production and presentation at Domotechnica (fair)



Product launch of silk-screen printing



Product launch of CERAN HIGHTRANS® with optimized IR transmission



Presentation of CERAN® for gas application and possibilities for multi-color decoration



CERAN SUPREMA® product launch: The new melting technology means there is no need for the toxic heavy metals arsenic and antimony in production



Product launch of CERAN CLEARTRANS® - a transparent glass-ceramic cooktop



Product launch of CERAN HIGHTRANS® eco - the first environmentally-friendly glass-ceramic cooktop that can transmit blue light



Product launch of white light solutions with CERAN HIGHTRANS® eco



Product launch of CERAN Miradur® - the world's first scratch-resistant glass-ceramic cooktop



Product launch of CERAN EXCITE® (light portfolio)



... and the story continues. Be excited.

Pioneering production process

Redefining technological boundaries requires a great deal of experience and precise science.



Step 1

The special raw material mixture is heated to melt glass.



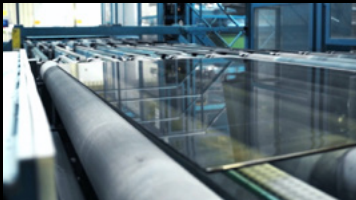
Step 2

The liquid raw glass is rolled to the correct thickness.



Step 3

The glass is cooled down in a controlled manner.



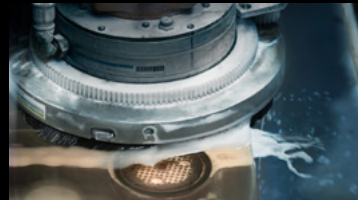
Step 4

The glass is cut and inspected before further processing.



Step 5

The cooktop is cut to customer specifications.



Step 6

The edges are ground and further refined.



Step 7

The cooktops are printed individually and always bear a SCHOTT CERAN® logo.



Step 8

Ceramization follows at 900 degrees in the oven, from which the robust glass-ceramic emerges.



Step 9

Final quality control is performed before delivery.

High quantities

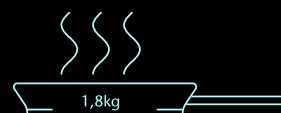
Despite increasing complexity and product diversity, SCHOTT produces and refines large quantities of glass-ceramic cooktops on a daily basis at various production sites such as Germany, the USA and China.

Best quality

The maxim for each individual production step is the highest quality. This is how the original „made in Germany“ is manufactured.

Convincing characteristics

In addition to its extreme temperature resistance, CERAN® also impresses with its robustness. The glass-ceramic is shock-resistant and particularly durable. It is also sustainable - from resource to production to application.



150,00 mm

SCHOTT CERAN®

SCHOTT CERAN® impresses with sustainability



200t

of toxic heavy metals are saved from polluting the environment every year



100%

recycling of shards from the worldwide production process



25%

reduction in energy consumption per ton of glass processed (since 1989)



80%

reduction in fresh water consumption (since 1989)



75%

reduction in nitrogen oxide emissions (since 1990)

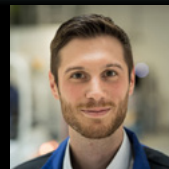
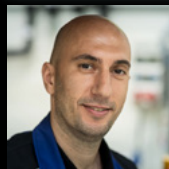
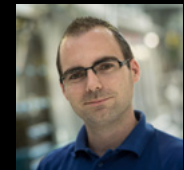
People

It's all about teamwork.



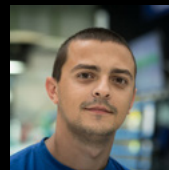
„Innovation and research is part of our DNA.“

– Dr Matthias Bockmeyer, Head of Development



„Only those who live quality can maintain it in the long term.“

– Michael Schulz, Production Manager



„We exceed many standards. We place great emphasis on quality.“

– Petra Daferner, Head of Technical Customer Service



Always one step ahead

Even 50 years after the presentation of the first SCHOTT CERAN® glass-ceramic cooktop, SCHOTT engineers and developers will never rest. They continue to push forward and improve. Cooking is becoming more colorful, bright and interactive. CERAN® remains the rock star among the materials used in the kitchen - and gets better with age.

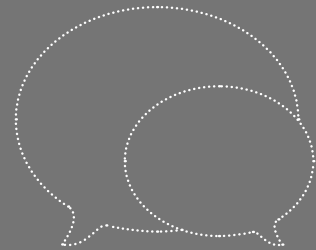


Let's get ready for the future.

What's your next milestone?

Contact

Kathrin Becker
Marketing Director CERAN®
SCHOTT AG



Links



SCHOTT CERAN®