Smart cooking

Light creates emotions. It brings glamor and color into the kitchen and inspires kitchen appliance manufacturers to create ever more unusual products. A new generation of glass-ceramic helps them to achieve unprecedented designs: SCHOTT CERAN Luminoir[™].



The kitchen is the heart of every home. This is where people come together, whether it's for cooking, eating, living, or – more recently – for working, because of the last two years spent working from home. This development is reflected in interior design trends and appliance designs that combine aesthetics and functionality. Here, light plays a key role. It creates a modern atmosphere suitable for everyday use and makes radiant ways of interacting with kitchen appliances possible, first and foremost through the cooktop. Whether it's through dig-

ital controls, displays, or flexible cooking zone markings, light allows people to communicate intuitively with technology. And that makes cooking (and working) more exciting.

For cooktop designers, the brightness and brilliance of light are particularly crucial. But color fastness and variety also constitute important distinctive features. For its CERAN EXCITE[®] lighting portfolio, SCHOTT has already developed a variety of coatings and filters that leading household appliance manufactur

ers such as Siemens and LG use to make their glass-ceramic cooktops more interactive and exciting. So far, these products are mainly available in the premium segment. But a new generation of black glass-ceramic for cooking called CERAN Luminoir[™] will bring fancy light features to even more households in the future.

Creative lighting design – with glass-ceramic

This is thanks to a completely new composition of the material. It optimizes the

In 2021, SCHOTT CERAN[®] celebrated its **50**th

CERAN EXCITE® makes cooktops interactive and excitina.

birthday

CERAN[®] will be voted Brand of the Century for the second time in

2022



transmission process, i.e. the light transmittance of the glass-ceramic, while also making it jet black. That means that additional filters and coatings are no longer necessary. This simplifies the production of cooktops and makes them more **New cooking experience for everyone** cost-efficient.

"Our latest product generation acts like an optical gray filter," explains Dr. Jörn Besinger, Head of Product Management & New Business Development of SCHOTT CERAN[®]. "Unlike previous glass-ceramics, which have a high transmittance especially in the high, red range of visible light, our new material has a uniformly high transmittance across the entire range of visible light."

White and blue light as well as color combinations can therefore penetrate the glass-ceramic better. Colors appear brighter and contours even sharper, even with diffuse light or color gradients.

"While red has been prevalent in the cooking zone area and in cooktop digital displays, white light will play a greater role in the future," Besinger predicts. In either case, all conceivable options are open to the lighting design. And the same applies to appliance design. In addition to better light transmission, the new formulation also affects the appearance of the material. Instead of having a slightly reddish shimmer depending on



CERAN Luminoir[™] brings pure elegance into the kitchen. It appears deep black and allows all visible colors to shine through.

the light conditions, the built-in glassceramic cooktop surface looks deep black at any time of day. This makes for a classy design statement in the kitchen.

Soon, the new product will be used in many kitchens around the world. This is because its properties make CERAN Luminoir[™] ideal for mass production. "The new material formula enables our customers to save on production effort and costs. Bright and multicolor light features can also be achieved without additional filter layers. This not only saves material and production steps, but also makes innovative lighting solutions in cooktops interesting for a broader group of buyers," explains Dr. Matthias Bockmeyer, Head of Development in the Cooking division at SCHOTT.

Half a century ago, black glass-ceramic for cooking caused a worldwide change in thinking and quickly became the standard material for radiant, induction, and gas cooktops. Up until now. How impressive would it be if, after 50 years, CERAN Luminoir[™] marked the beginning of a new, radiant era in kitchen design? In any case, this new glass-ceramic has what it takes to make the cooktop of tomorrow smarter and bring a new kind of cooking experience to as many people as possible in kitchens around the world.