

Shorter Cooking Times

A new generation of glass ceramic cooktop panels will make fast cooking even faster. The cooktops cuts boil-up times and set new standards in terms of environmentally friendly application.

► Despite millennia of cooking history, the present day and age-old aim of appliance manufacturers and users alike to have time-saving, convenient, and clean kitchens has only recently become a reality. "Ceran Suprema," a new generation of glass ceramic cooktop panels, has made great new strides in this pursuit. Its development is a milestone in cooking technology and enables cooker manufacturers to devise improved concepts for their cooking appliances to meet the demand for shorter boil-up times. The technical prerequisites for this were a higher infrared (IR) transmission, which allows the heating energy to pass through to the cookware more efficiently, and a higher temperature and time load.

Future ecological standards fulfilled

"The new glass ceramic for 'Ceran Suprema' cooktop panels is based on a new material composition. However, we were only able to achieve the higher transmission and temperature load after combining this novel material with special technology," says Dr. Erich Rodek, Director of Melting Technology and Heat Molding in the White Goods Business Segment.

The manufacturing process also offers environmental advantages because the production of ecologically questionable substances is avoided. Glass ceramic cooktop panels produced using this process are in compliance with the principles of the EU's Green Book on product policy, and are thus in line with the long-term European environmental strategy. They also fulfill future legal requirements and therefore long-term delivery can be guaranteed. An-

other aspect of the ecologically oriented "Ceran Suprema" cooktop panels is the new collection of environmentally friendly color shades of decoration, ranging from black and white to trendy shades in a variety of gradations.

Boil-up time reduced by 16 percent

The properties of the new cooking surfaces have been investigated in extensive tests. As part of a time-load analysis, the new cooking surface was shown to be more heat resistant at higher temperature settings than comparable surfaces. Cooking appliance manufacturers can thus adjust the integrated heating elements to higher cooking zone temperatures from the present conventional



cooktop panels into their cooking appliance concepts. For example, it is important to ensure that with heating elements adjusted to higher temperature settings, the temperatures stay within the allowed limits – especially in the countertop area. As tests in cooperation with producers of heating elements have shown, it is preferable to have an intelligent temperature control system for the cooking zones instead of a permanent higher adjustment – especially with compact designed cooktop systems. During the boiling phase when energy is required to quickly heat the contents of the cookware, the temperature sensor operates at a higher control point, which is then reduced to a lower adjustment after the boiling process is finished. In this way, the higher boil-up performance can be used with "Ceran Suprema" easily and according to standards.

A milestone in cooking technology

Manufacturers of heating element and control systems were consulted in the early stages of development so that the necessary parts for systems using the "Ceran Suprema" cooktop panels would be available for smooth product integration. Cooker manufacturers are thus able to judge the potential for the new glass ceramic cooking surfaces quickly and thoroughly. "The market launch of 'Ceran Suprema' has already begun," says Stefan-Marc Schmidt, Sales & Marketing, White Goods Business Segment. "And a new chapter has been written in the history of time-saving, convenient and easy-to-clean kitchens with 'Ceran.'" ◀



The new "Ceran Suprema" glass ceramic cooktop panels can reduce boil-up times by 16 percent.

temperature of 560° to 600° Celsius. Compared with the its predecessor, "Ceran Hightrans," tests have shown that the boil-up time with "Ceran Suprema" is reduced from 10.1 to 8.5 minutes (-16 percent) depending on the cookware.

It is now up to cooking appliance manufacturers to exploit these advantages and to integrate the new generation of

