



HIGH-PERFORMANCE CERAMICS

COMPONENTS FOR FOOD STERILISATION SYSTEMS

Application:

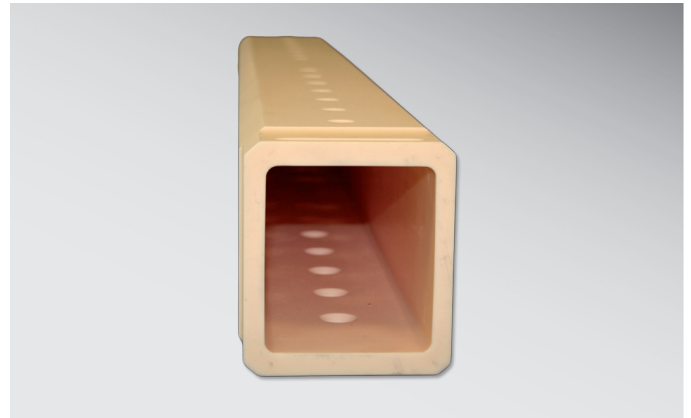
Flow Units in Fruit and Vegetable Sterilisation Systems

Material:

Alumina F99.7

Flow units made of oxide ceramics are manufactured in lengths of 500 mm and 1000 mm. They are built in a cascade construction consisting of 8 rectangular tubes (cross-section 65 x 95 mm).

This component design is used mainly in the sterilisation of fruit pieces for yoghurts, ice creams and deserts, as well as vegetables pieces for ready-made meals. As compared to conventional processes, it was possible to reduce product residence time under temperature from approximately 40 minutes down to 7 minutes. As a result of reduced thermal stresses on the products, ready-made meals stay firm to the bite after reheating in the microwave or steam cooker.



During fruit processing, the structure of the fruit remains undamaged or is only very slightly affected. In conventional processing only 35 - 40% of the original 60% fruit content could be maintained in the end product.

The use of alumina F99.7 rectangular tubes means that a fruit content of 55% is achieved in the end product. F99.7 is used because of its electrical insulation properties and its exceptional compatibility with foodstuffs.

Further advantages of high-performance ceramics include sterilisability of the system and tubes and the low degree of adhesion of flow-through products to the inner walls. The use of F99.7 leads to a qualitative increase in value of the end product as well as extended system lifetime. The result is fewer production downtimes, which, in turn, enable accelerated plant amortization.

- ▶ Electrically insulating
- ▶ Compatible with foodstuffs
- ▶ Sterilisable