

PROJECT PROFILE

Project: Thermal Processing for Japanese Breadcrumb / Panko
Product/Process: Dielectric Process

Summary:

Petrie has proved that Japanese breadcrumb can be baked commercially by means of a dielectric process.

Process patented.



Description:

PANKO, meaning breadcrumb in Japanese, is coarser in texture when compared to European breadcrumb.

The splintered appearance of PANKO makes it much lighter and provides crunchier food toppings and coatings.

Traditionally white PANKO is made by a laborious and inefficient method, where bread is baked, and the crusts cut off, and then broken into coarse pieces prior to drying in an oven on a low heat.



Image courtesy of AsianFoodGrocer.com

The whole process is slow and expensive, with 10% of the original product lost through crust wastage.

How could dielectric heating technology (Radio Frequency or Microwave) improve upon this process?

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Solution: Crustless Breadcrumb

Petrie has proved that Japanese breadcrumb can be baked commercially by means of a dielectric process, using dielectric heating technology. Dielectric heating is applied through the dough, cooking it from the inside out, ***without the formation of a crust.***

Because of this, the crumb is uniformly light in colour and there is *no product wastage.*

The unique texture of the crumb results from the way in which energy is applied to the dough during proofing and is now secured by patent.

Advantages:

- **No visible crust**
- **3-4 times faster proofing and baking time**
- **Lighter and crunchier texture**
- **Remains crisper for longer**
- **Unique fine crumb texture**
- **Unlike ordinary breadcrumb, dielectrically baked Panko coated foods can be grilled as well as fried, baked and sautéed**