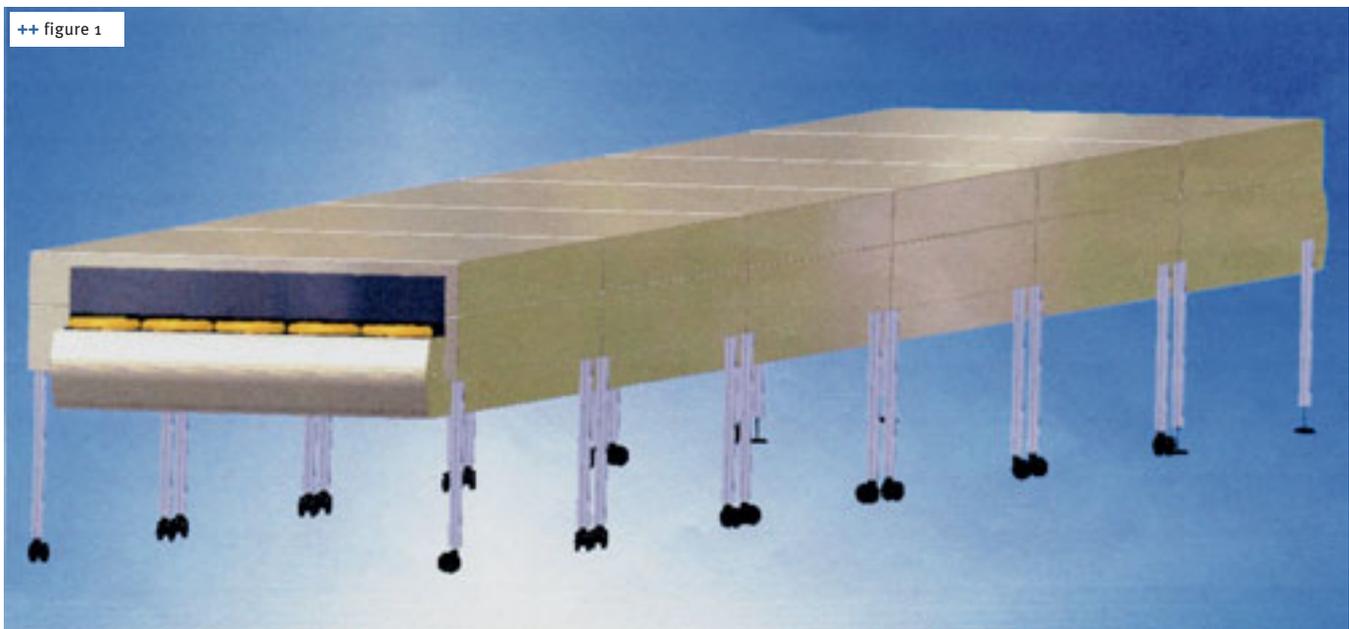


New ideas

EBERHARD DOLSKI WAS THE CHIEF ENGINEER RESPONSIBLE FOR PIZZA PRODUCTION TECHNOLOGY AT A WELL-KNOWN MANUFACTURER IN BERLIN FOR 18 YEARS. HE HAS NOW DESIGNED A NEW OVEN FOR INDUSTRIAL MANUFACTURE

++ figure 1



++ figure 1

Sketch of a STIRDO oven, which according to the designer Eberhard Dolski weighs less than half as much as a conventional oven, bakes twice as fast and uses distinctly less energy

+ bbi: Mr. Dolski, you have designed a new pizza oven and plan to market its prototype next year. Are you not satisfied with the ovens already on the market?

+ Dolski: That would be the wrong view to take. My aim is to design an oven that focuses totally on pizza production. Normally the ovens available today are modified ovens originally designed for bread baking, for example. In my time as chief engineer I repeatedly needed to make modifications and optimisations. I have now used all this experience as the basis on which to develop our oven.

+ bbi: Our oven?

+ Dolski: The STIRDO oven is a stone baking oven for pre-baking pizzas. I designed it and it will be fitted with IBT's STIR infra-red technology, that's why it is called the STIRDO.

+ bbi: What are the basic principles?

+ Dolski: Less weight, more hygiene, faster baking with less energy and simple maintenance.

+ bbi: What exactly do you mean by simple maintenance?

+ Dolski: Accessibility is naturally of prime importance. If you want to repair a tunnel

oven nowadays, first of all you have a long wait until it has cooled down sufficiently in order that secondly a slim mechanic can crawl into the oven. There are better ways of doing it. The ball bearings are another point to consider; they need changing after six months following a continuous three-shift operation. An oven 25 m long has almost 1,000 of them and they cost several euros each. There are no ball bearings in the STIRDO. Instead there is a solution with a lifetime of at least ten years before it is due for replacement.

+ bbi: How do you bake faster with less energy?

+ Dolski: The STIR technology provides part of this solution, and another part is due to the choice and properties of the stone. Added to that is the effect of the oven geometry, and of course the oven's insulation also plays a part.

List of abbreviations

IBT	IBT. InfraBioTech GmbH, Freiberg
STIR	Selective Transformed Infra-Red, an IBT trademark
iba 2012	The International Baking Trade Fair in 2012 +++

++ figure 2



© Eberhard Dolski

++ figure 2
Dipl.-Ing. Eberhard Dolski

+ bbi: How do you achieve less weight?
+ Dolski: A pizza is pre-baked in 90 min, and for that it needs exclusively radiant heat with neither turbulence nor clouds of vapour. We carried out various experiments on this at my previous workplace. Radiation plus stone is the ideal combination.

+ bbi: Of course improved hygiene is also a big promise.
+ Dolski: But it's easy to achieve, for example if the oven is built in such a way that it can be cleaned underneath, if the topping applicator functions accurately and the stone slabs can be changed easily and quickly.

+ bbi: Why is a stone baking oven absolutely essential? Removing a baked-on pizza from the stone at the right time without distorting it is not without problems.
+ Dolski: If a pizza really is baked on stone rather than on trays pushed over stone slabs, the taste is different because the heat transfer and thus the baking process are different. Apart from that it's also a marketing advantage.

+ bbi: The oven is designed, but who is going to build it?
+ Dolski: Firstly we are in the process of safeguarding the ideas by patenting, and secondly we are holding concrete discussions with two oven constructors to allow the prototype to be built in 2011. We will then present the oven to the public at the iba in 2012 at the latest.

+ bbi: Will you stay with pizza ovens or can we expect other developments from you?
+ Dolski: We are already working on the design of variants of the oven using STIR to bake biscuits/cookies and to pre-bake bread rolls.

+ bbi: Biscuits/cookies from a stone bake-oven?
+ Dolski: Why not! With gingerbread for example, I can well imagine that would have a favourable reception among consumers.

+ bbi: Thank you for the interview, Mr. Dolski. We wish you all the best in your future work. +++

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