

# Closed system smoking of meat

*The Circo-Smoke System by Ness provides a unique solution for producing smoked meat products. The solution combines quality smoking, with economic and environmentally-friendly operation.*

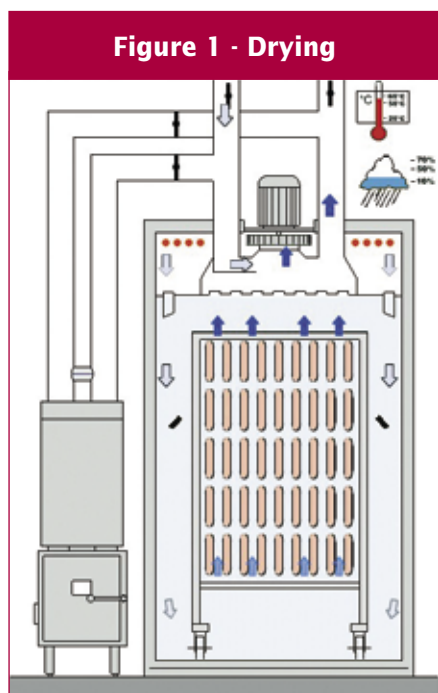


**A**s a leading company in their field, Ness & Co. GmbH says they want to maintain their advantage over their competitors through both in-house R&D and active co-operation with leading research institutes both in Germany and abroad. Universities carry out research and work with their equipment and systems. Ness supports research projects in the areas of

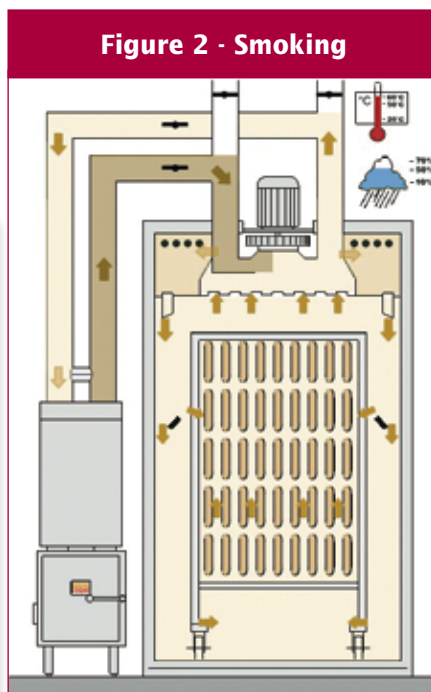
heat treatment, smoking technology, process control, and environmental protection.

### Successful strategy

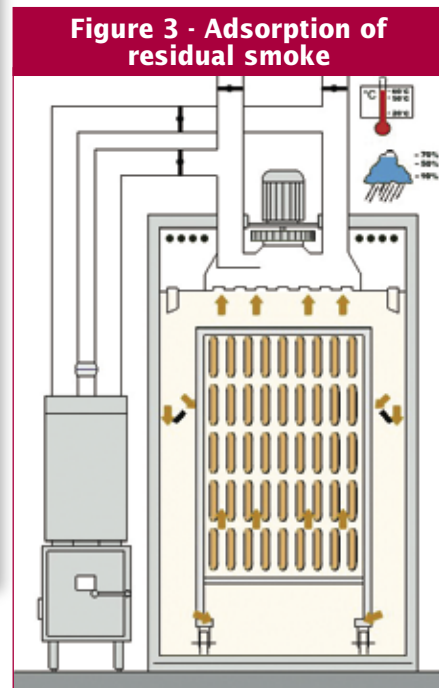
Over the years, successful patented designs have proven the worth of Ness' R&D strategy. According to Ness, they developed the first friction smoking system, the first microprocessor-controlled system, and most recently, the Circo-Smoke System.



Before smoke is being generated, food to be treated has to be dried in order to ensure an optimum smoke application. During this process, smoke generator flaps are closed, fresh air and exhaust air flaps open.



Now fresh air and exhaust air flaps are closed and the smoke generator flaps open. The chamber contents are thus separated from the environment. A partial current of the generated smoke is drawn from the treatment chamber, enriched with newly generated smoke and readmitted to the treatment chamber. During this phase of the smoking process, no flue gas mixture reaches the atmosphere.



The smoke generator is switched off and all flaps are closed. The chamber contents are circulated until the smoke constituents have been taken up by the food to be smoked. The smoky atmosphere increasingly weakens.

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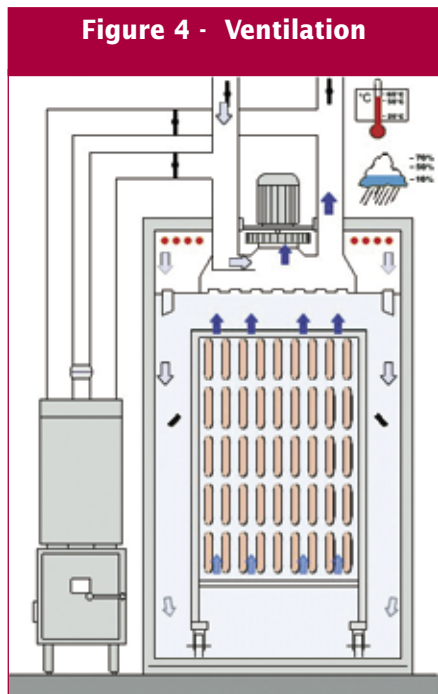
## Economic

With the closed system, the Circo-Smoke System generates only as much smoke as necessary to accomplish the smoking process. The system uses up to eighty percent less smoke than open systems. This smoke optimisation enables minimum energy consumption, less quantities of waste water, and low contamination of the smoke tubes.

The quantity and degree to which waste water is soiled will in future become more important as regulations regarding facilities are evaluated by local country governments.

## Environmentally-friendly

Independent of the smoke generating system, the Circo-Smoke process enables compliance with the technical instructions of clean air without post-combustion system, catalysts, or air washer. **MI**



*After a few minutes, smoke constituents have been taken up by the food to be smoked and fresh air and exhaust air flaps are opened.*