

# Aseptic packaging technology sets the trend for **safer baby food**

Constant improvements in safety and sterilization are essential to baby food manufacturers and processors. More than any other, this sector of the food industry depends on absolute trust between its brands and consumers.

Especially for this sector, Bosch has now launched the new automatic Servac **TFA 4830 PP**; a sophisticated mid to high capacity aseptic thermoform/fill & seal machine that replaces traditional glass jars with safe and convenient plastic cups. The **TFA** can utilize Polypropylene webs (PP) to make filled cups that can be heated up by the consumer in a microwave oven. In the case of baby food, this convenience totally satisfies the needs of the user and the appetite of the little gourmet.

## Aseptic filling method

The gentle and energy saving aseptic filling method designed by Bosch allows pre-sterilization before the filling of the baby food product. This process keeps vitamins and sensitive nutritional components of the packaged food intact. The hygiene level of the packaging machine also makes it possible to realize a product shelf life of up to twelve months at ambient temperatures.

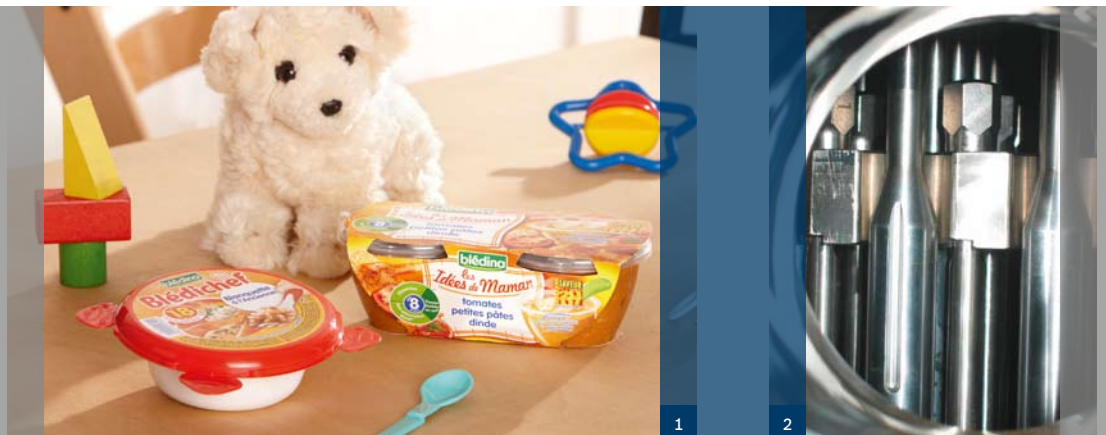
Excellent production security is maintained by this highly reliable system with liquid H<sub>2</sub>O<sub>2</sub> baths, which provide perfect sterilization of the packaging material, while catalytic converters are used in

the machine's exhaust to neutralize the vapors emitted by the processing. Filtered nitrogen is used in the efficient gas flushing systems for the head space of the cups and this keeps oxygen levels down to only 2% in the cup head space, while increasing product protection.

## Full metal filler design

The integrated full metal piston filler maintains precise filling of the product. Even with high viscosity mixtures of baby food that may include particulates, the weight deviations do not exceed a value of  $\pm 2$ g per cup. This precision generates remarkable cost reductions, keeping

- 1 Babies love it all
- 2 A view into the full metal piston filler
- 3 Aseptic thermoforming machine **SERVAC TFA 4830 PP**
- 4 A screenshot of the comfortable HMI control screen



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package overfills within an acceptable range.

The filler design maintains a high hygiene level and excellent CIP process results, as it does not include any elastic gaskets or sealing. It also needs very little maintenance. Each fill piston is connected to one fill nozzle that constantly fills the product. The metal pistons slide within their bushings without any further gaskets and the precise fit of the moving parts means that the nozzles remain tight and prevent leakage. The servo drives of the filler also allow a precise adjustment of the fill volume without stopping the machine.

Machine operation is performed via the built-in operation panel, with a touch sensitive screen. The comprehensive, password protected and menu supported operating system allows fully automatic adjustments of technical parameters as a result of a recipe change.

#### Complete line available

A recent order for the TFA has been placed by BLEDINA (part of the DANONE group), which already has three Bosch aseptic baby food machines in production; the first one having been delivered in 1992. The aseptic thermoforming

machine is the main item in a new packaging line for the company. BLEDINA will complete the line with additional machines and systems which will be integrated and supplied by Paal, which joined Bosch Packaging Technology in 2008 and is an experienced specialist in reliable downstream solutions.

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