

What's new at JBT?

Aseptic Processing & Packaging Solutions



JBT has long experience helping processors improve the quality and shelf life of their ambient shelf-stable products. As a matter of fact, more than 50% of the world's shelf-stable foods are

filled, seamed or sterilized using JBT equipment. With several thousand lines in operation worldwide, JBT is the world's leading supplier of integrated processing solutions for metal, glass and plastic containers.

From single machines to complete processing lines, JBT enhances product value and safety. JBT equipment preserves optimum quality, nutrition and taste in food products while producing them at the lowest cost per unit.

Up till now JBT processing solutions were mainly geared towards ambient filling, closing and in-container processing. With the acquisition of Dutch company Stork Food & Dairy Systems in 2015, JBT now offers a comprehensive range of aseptic solutions to extend shelf life for more sensitive products.



Integration of equipment cuts costs and improves quality, taste and food safety

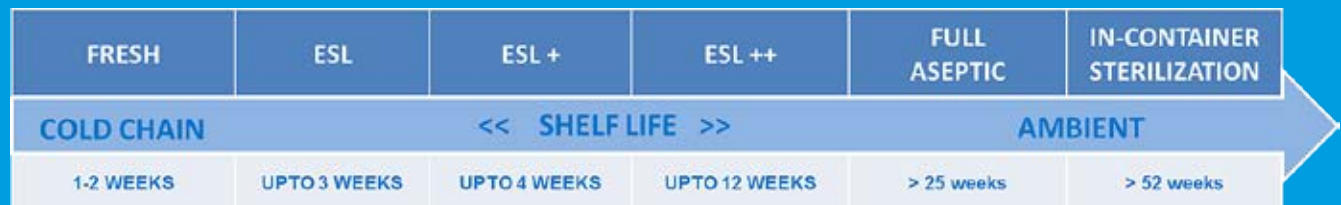
The key to Extended Shelf Life (ESL) and aseptic technology is hygiene. The shelf life of a chilled dairy product or juice, for example, cannot be extended without first raising levels of hygiene across the entire line. Although new processing and filling or packaging systems offer good opportunities for improving the hygiene level, no single piece of equipment will do the trick alone.

ESL and aseptic packing is not just about technology and equipment; it is about a system, the success of which depends on the hygienic strength of the entire production and distribution chain.

At the end of the production line, the quality and shelf life of products depend on effective processing, filling and packaging. For aseptic processing, JBT has incorporated these three components into one solution. To deliver an effective and flexible process system, JBT supplies – under the SF&DS brand name – a range of pasteurizers, sterilizers, bottle blow molding units and aseptic or high hygienic fillers for ESL and commercially sterile products. All units have been developed for straightforward integration and are able to meet specific process requirements.

This gives processors complete control and comprehensive production logs to meet regulatory requirements and Total Quality Management (TQM).

JBT makes maximizing shelf life easier even for sensitive products:



JBT SF&DS's integrated aseptic line concept

JBT In-Flow Processing Equipment

There are two technologies for UHT processing: indirect heating and direct heating.

For standard applications, JBT offers the indirect JBT SF&DS Sterideal® Coil system. This tubular in-flow heat exchanger is used for pasteurizing and sterilizing dairy products, fruit juices, sauces and other liquid food products. The indirect process, with its unique helical configuration of concentric tubes, ensures an effective thermal regime combined with efficient heat recovery. This saves energy costs and optimizes the taste and shelf life of products. A typical maximum process temperature is 140°C (284°F).

JBT Sterideal Coil units can also process highly viscous products and products with particles at a capacity of 2,000 to 24,000 liters per hour (8.8 - 105 gpm). For this reason, the Sterideal can be considered as the most versatile solution for total aseptic safety.

For special applications, requiring an even higher process temperature, JBT recommends the **JBT SF&DS SteriTwin-Coil**. The SteriTwin-Coil consists of two units, an indirect system and a direct system. Depending on the required process, it is possible to use the indirect heating system on its own or a combination of both systems. In other words, with the SteriTwin-Coil you can take advantage of the benefits of both direct and indirect heating.

The SteriTwin-Coil can process a wide range of products, using direct or indirect heating for greater flexibility at a capacity of 2,000- 24,000 liters per hour (8.8 - 105 gpm).



Aseptic linear filler for sterile products



The JBT SF&DS AsepTec® is a reliable linear aseptic filler that stands out by the range of products and bottles (HDPE, PP, PET) it can handle at high line speeds. It was designed to provide carefully controlled and verifiable filling conditions.

Its key advantage: unmatched and proven aseptic performance with aseptic runs of over 100 processing hours at a maximum capacity of 30,000 bottles/hour.

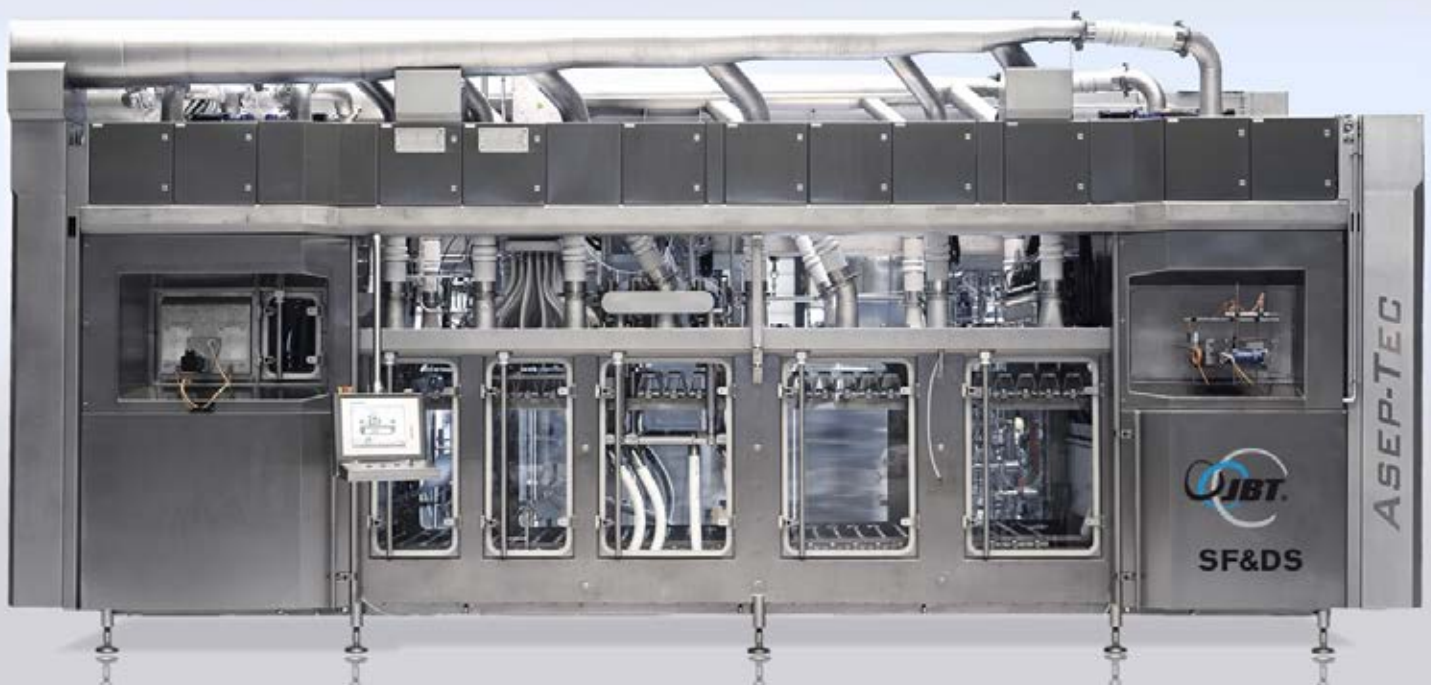
This machine can handle high and low viscosity products, and even products containing solids.

As a result, a single filler can handle a broad product range. The change-over between different container shapes, sizes or products can be achieved – without breaking sterility – in less than 30 minutes.

After filling, bottles can be closed with an aluminum seal or a screw cap. When handling particularly sensitive products, the air in the bottle can be replaced by nitrogen to prevent oxidation. Depending on product requirements, this can be done before and/or after filling. This enables the expansion of product ranges with, for example, vitamin-enriched products, fruit juices or clinical products.

JBT can now provide aseptic filling solutions for HDPE/PET with aluminum foil and/or an aseptic screw cap on one platform.

Within the smallest aseptic zone available in the market, the AsepTec is the first and only filler with an aseptic screw cap module with FDA approval for PET and HDPE bottles.



The BottleTec™ Extrusion Blow-Molder

Innovative bottle designs can make products stand out on the shelf and lead to stronger brand positioning. The JBT SF&DS BottleTec™ produces bottles in every possible shape, with molds that can be easily changed to accommodate different container designs.

The JBT BottleTec equipment produces lightweight HDPE bottles, which are available both in open, non-sterile and closed, internally sterile versions. This machine can produce bottles ranging in size from 0.2 to 1.5 liters (6.75 - 50 fl oz).

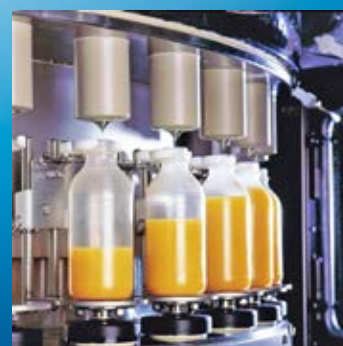
The centerpiece of the BottleTec is the carrousel, which contains the bottle molds. Depending on the capacity required (up to 7,500 bottles per hour) it is possible to fit four to 15 molds per carrousel. The BottleTec can be converted to different bottle sizes in minimal time.

The JBT BottleTec is designed to produce mono or multi-layer bottles with oxygen and UV blocking layers to protect the product from external influences. In these cases, the equipment will be supplied with extra extruders so that 3-layer bottles (light barrier) or 6-layer bottles (light and oxygen barrier) are produced in a co-extrusion process.



High hygienic non-contact weight fillers

JBT weight fillers are geared with a conditioned filling space and an effective C.I.P. system. They are available in a standard, high hygienic or ultra clean version. All these weight fillers use an extremely accurate, non-contact weight filling system to minimize product giveaway. They can be combined with a bottle rinsing unit and a capper/sealer to form a monoblock machine processing at a capacity up to 30,000 PE or PET bottles per hour.



WP-A003-EN



JBT Food & Dairy Systems

Deccaweg 32 | 1042 AD Amsterdam | The Netherlands

Phone: +31 (0)20 636 97 54 | Fax: +31 (0)20 636 97 54

HELLO@JBTC.COM