

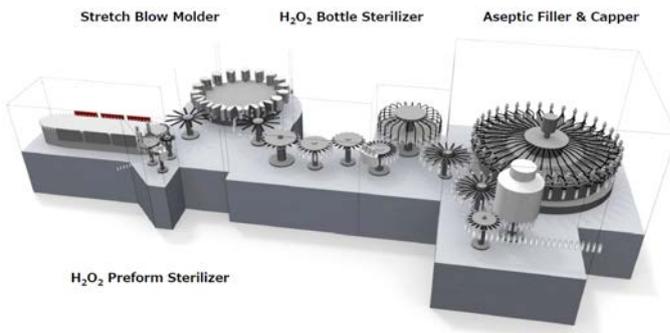
# Aseptic Systems

## Our Aseptic Filling System for PET Bottles

In 1994, we applied our proprietary aseptic filling technology to PET bottles and launched Japan's first PET bottle liquid filling machine using hydrogen-peroxide sterilization. Since then, we have solved numerous beverage-industry challenges and earned high praise from customers worldwide. To date we have delivered over 200 filling systems in Japan and overseas, capturing over 60 % of the domestic PET bottle liquid filling machine market (our survey). In addition, we supply a full range of PET preforms to accommodate every bottle type.



System Overview



### System Details

**Products :** Tea, coffee, juice, beverages with pulp or particles, water and CSD  
**Bottle sizes :** 100-2000 ml  
**Mouth diameter:** 28Φ-38Φ mm (screw and sports caps)

## Important Statistics

<p>Top Speed</p> <p><b>72,000 BPH</b></p>	<p>Changeover Times</p> <p>Less than <b>2 hours</b></p>	<p>Efficiency</p> <p>Over <b>98%</b></p>	<p>Low-Acid Systems Installed</p> <p><b>200+</b></p>
<p>For FDA Systems</p> <p><b>10</b></p>	<p>Aseptic Patents</p> <p><b>400+</b></p>	<p>Aseptic History</p> <p>Over <b>50 years</b></p>	<p>and more</p>

IMPROVEMENT  
"KAIZEN"



High Productivity



High Quality



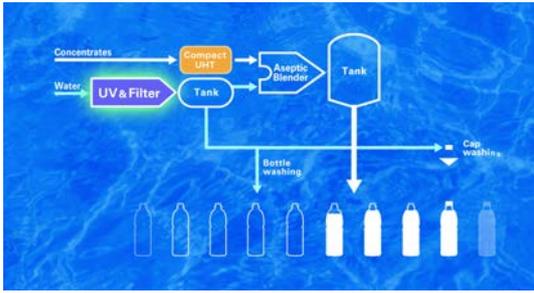
Lower TCO



Sustainability

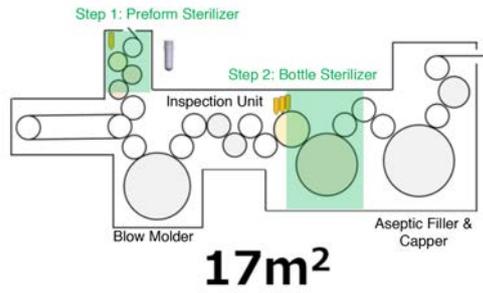
# Our Aseptic Filling Technologies

## Green Aseptic™ — Sustainability



Non-heated Water Sterilization  
Up to 80% CO<sub>2</sub>e & Energy Savings

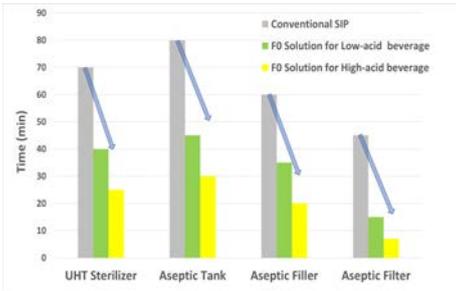
## Two-Step Sterilization — Lower TCO



30% Floor Space & 40% Energy Reduction  
Up to 60,000bph

17m<sup>2</sup>

## F<sub>0</sub> Solution — High Productivity



Reduce SIP processes by 50% or more

## CSIP — High Productivity



Fastest changeovers: < 2.0 hours

## N<sub>2</sub> Hood — Nitrogen Flushing



>90 % of Head-Space Air with Sterile N<sub>2</sub>

## Aseptic CSD — Carbonated Filling



Sterile Carbonation with No Downstream Pasteurizer

## Our Three Core Business Pillars

In addition to our industry-leading PET-bottle aseptic filling systems, we develop, market, install, and service two turnkey solutions—liquid filling machines for paper carton and bag-in-box filling systems.

### Aseptic filling machines for PET bottles



### Liquid filling machines for paper containers



### Bag-in-Box filling machines

