

HYDROLOCK

CONTINUOUS STERILIZERS



WELCOME

**MAKE YOUR PRODUCTS
STAND OUT**

PROCESS ENGINEERING, R&D, STERILIZATION SYSTEMS DESIGN & MANUFACTURE,
TURNKEY PRODUCTION LINES FOR STERILIZED FOODS & BEVERAGES, MAINTENANCE

- I. What is High Pressure Processing (HPP)?
- II. HPP applications
- III. Hydrolock's solution : Steribar HPP
- IV. The advantages of Steribar HPP



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Hautes Pressions ?

Technique which consists in
subjecting packed foodstuffs
to very high pressures
between 4000 to 6000 bars,
also called "pascalisation"

Mont Everest
8848 m

Mer
0 m

Talon aiguille
(Femme de 60kg)

Fosse des Mariannes
10920 m



Applications agro-
alimentaires

0,03 MPa

0,1 MPa

10 MPa

110 MPa

200 MPa

600 MPa

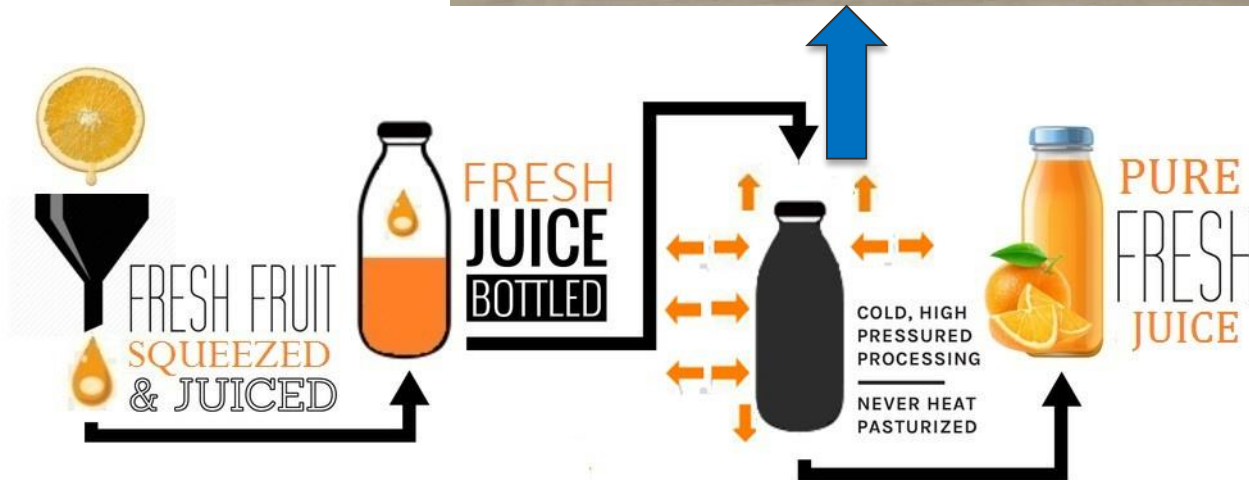
100 MPa = 1 000 bars

FIGURE 4 HIGH PRESSURE PROCESSING EQUIPMENT MARKET SEGMENTATION, BY APPLICATION



**Others include dairy products, grains and packaged condiments.*

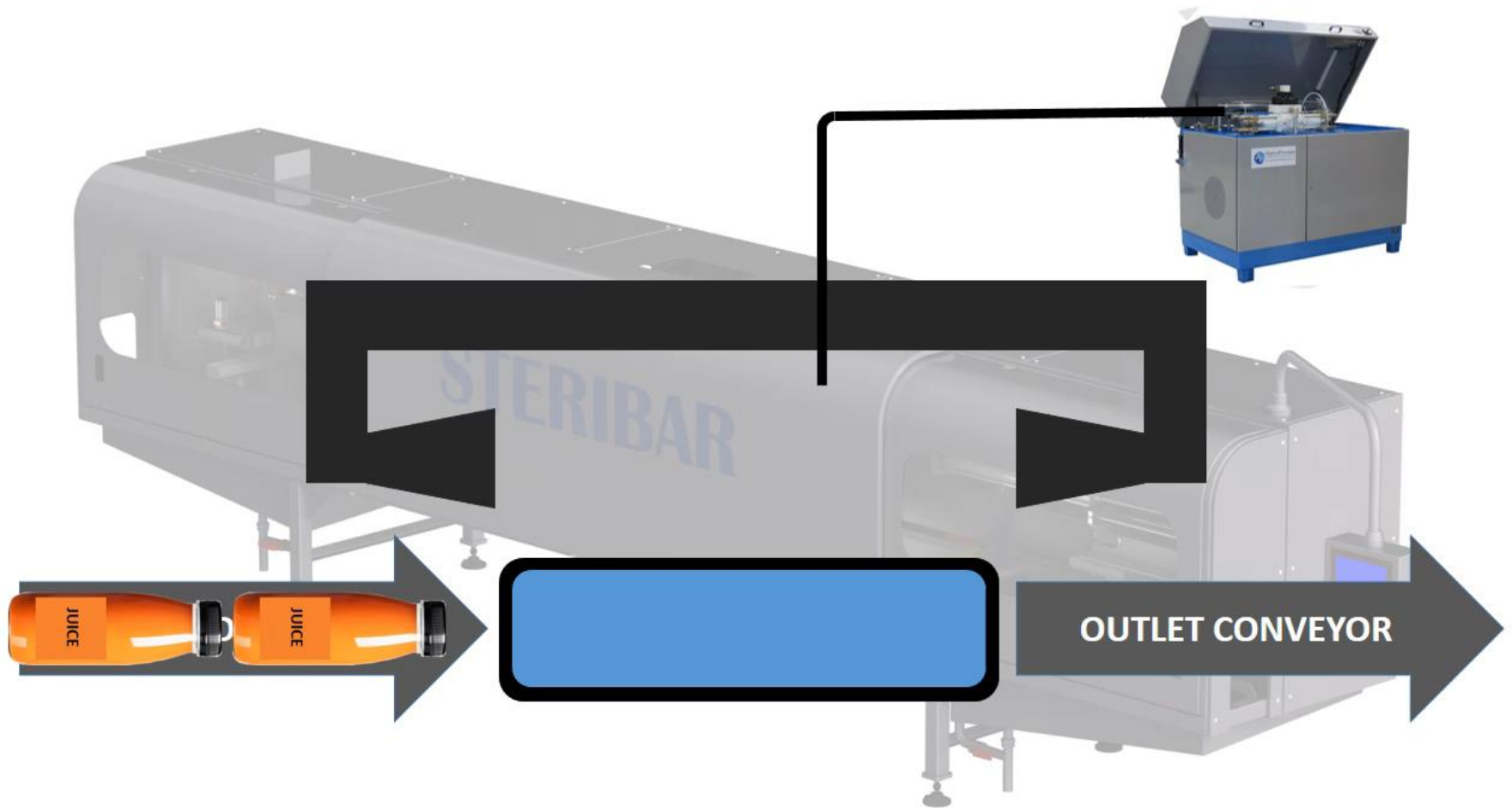
Source: Related Associations/Institutes, Related Research Publications, Expert Interviews, and MarketsandMarkets Analysis



Machine operating process, cold high pressure treatment: Steribar HPP
The machine works according to the following cycle:

- + Arrival of bottles on an online conveyor
- + Laying down of the bottles
- + Automatic loading of bottles in the high-pressure vessel
- + Closure of the vessel
- + Filling and pressure rise up by means of a medium-pressure pump and by means of a pressure intensifier
- + Infringement of the pressure setpoint and possible holding of this pressure during a preset time
- + Fast depressurization of the vessel
- + Opening of the vessel
- + Unloading of the processed products and simultaneous loading of the following load of products
- + Automatic stand up of bottles and alignment in the conveyor of exit towards the packaging machine.

HOW DOES STERIBAR HPP WORK ?



WITH STERIBAR HPP,
TAKE ALL BENEFITS FROM THE HPP TECHNOLOGY



A LONGER SHELF-LIFE
FOR YOU FRESH PRODUCTS

Our process uses only cold water, and achieves a clean label product with no preservative nor heat treatment.



FRESH AND TASTIER
PRODUCTS

The fresh food taste is preserved, and its shelf-life increased.



NUTRITION VALUE AND
TASTE ARE PRESERVED

while destroying the bacterias, and pathogens.

- ❖ *Longer shelf life*
- ❖ *Premium juice “clean label”*
- ❖ *Faster Return On Investment (ROI)*
- ❖ *Facilitated and secured operation*
- ❖ *Reduction of Total Cost of Ownership (TCO)*
- ❖ Cost and Time cutting for maintenance
- ❖ Operational Cost cutting



Smoothies



Fruit juice



Vegetable juice

On fruit juice HPP treatment allows to increase the product's shelf life while keeping the organoleptic properties of a fresh product:

- ❖ Taste
- ❖ Colour
- ❖ Vitamins and nutritional contents

HIGH PRESSURE, NO CONSERVATIVE

On vegetable juice, it allows to develop drinks with 'functional' properties thanks to the conservation of their contents in antimutagen and anticancer compounds



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