

TRY OUT OUR FOOD SAFETY SOLUTIONS

CONTINUOUS DEVELOPMENT

Our objectives are to improve and develop new solutions that eliminate the food industry's contamination challenges.

A Research & Development team is dedicated to research in the food industry and the operation of pilot plants near Paris (France) and USA (Reno, Nevada and New Jersey).

In Europe, USA and soon in India, trials are possible in industrial units.

Since 1995, more than 110 units have been established worldwide.



VOW THROUGH ITS SUBSIDIARY ETIA IS A MEMBER OF



GLOBAL FOOD SAFETY SOLUTIONS

Steam pasteurization, sterilization and ozone sanitation of your dehydrated products

Safesteril is a versatile process that can not only perform pasteurization and sterilization, but also disinfection, drying and roasting. Our Safesteril technology is based on the unique and patented combination of an electrically heated conveyor with steam, that reduces germ content with a minimal alteration of its properties.

Ozosteril is the leading solution for the continuous ozone sanitation of your dehydrated products of all shapes. Our Ozosteril solution achieves high performance of mycotoxins load reduction, while maintaining the organoleptical properties of the products. Taste, color and moisture are preserved.



OUR FOOD APPLICATIONS - SAFE AND SUSTAINABLE

Food safety	Heating solutions	Cooling solutions	Biomass waste & by-products
Sterilization	Blanching	Chocolate industries	Nut shells
Pasteurization	Roasting & toasting	Powders & solid bulk products	Oat husks
Pesticides reduction	Drying		Extraction waste
Mycotoxins reduction	Enzyme deactivation		
	Cooking		

SAFESTERIL PROCESS PRINCIPLE

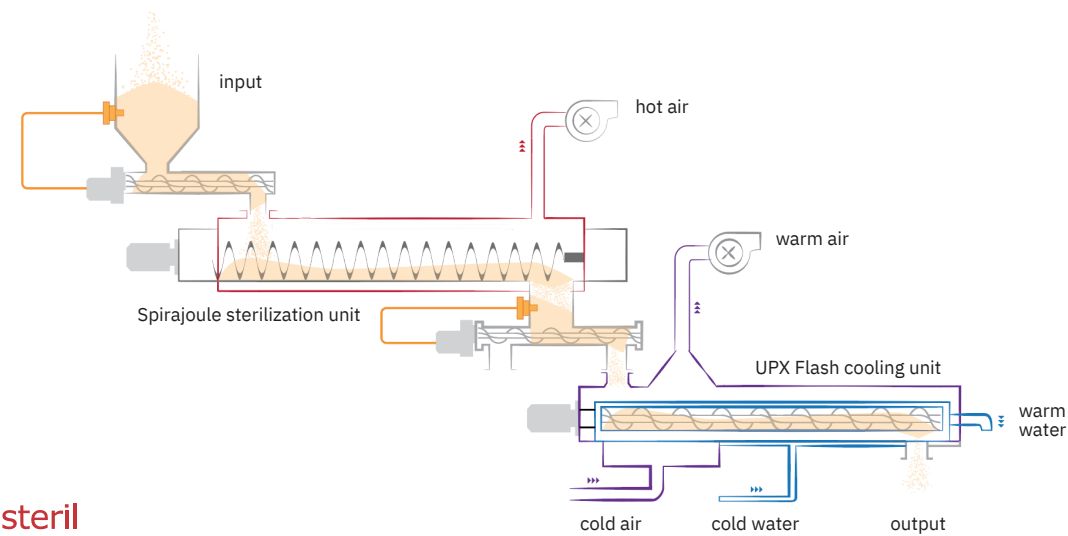
SAFESTERIL - A VERSATILE FOOD STERILIZATION SOLUTION

Safesteril was developed and patented by VOW's subsidiary ETIA in 1989.

Safesteril® can guaranty a significant reduction of TPC (except spore/heat resistant germ content) while other germs including pathogens are entirely inactivated: a 5-log reduction (Yeasts, Molds, Enterobacteriaceae (E.Coli), Coliforms, Salmonella) is assured, even with a moderate temperature treatment on Safesteril (Pasteurization mode).

With 110 systems installed in more than 35 countries, Safesteril is the leading solution for the continuous steam pasteurization and sterilization of your dehydrated products of all shapes: powder, granulated, crushed, shopped, flakes, whole and more...

PRINCIPLE



Safesteril

A VARIETY OF TREATED PRODUCTS

Hundreds of different products are treated by our organic process worldwide, including:

- Spices
- Herbs
- Nuts
- Seeds
- Dehydrated vegetables
- Pulses
- Grains
- Flours
- Nutraceutical

VOW
www.vowasa.com

ETIA
ECOTECHNOLOGIES

Safesteril
www.vowasa.com/our-brands/safesteril

ONGOING VALIDATION PROCESS

Ongoing validation process for reduction of pesticides and mycotoxins (aflatoxin, ochratoxin, DON) level, ozone.

- Proven track records on rice and wheat
- Cold process
- Up to 10 tons/hour
- Patented
- Ready to pack
- Low ROI

Ozosteril
www.vowasa.com/our-brands/ozosteril

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OZOSTERIL PROCESS PRINCIPLE

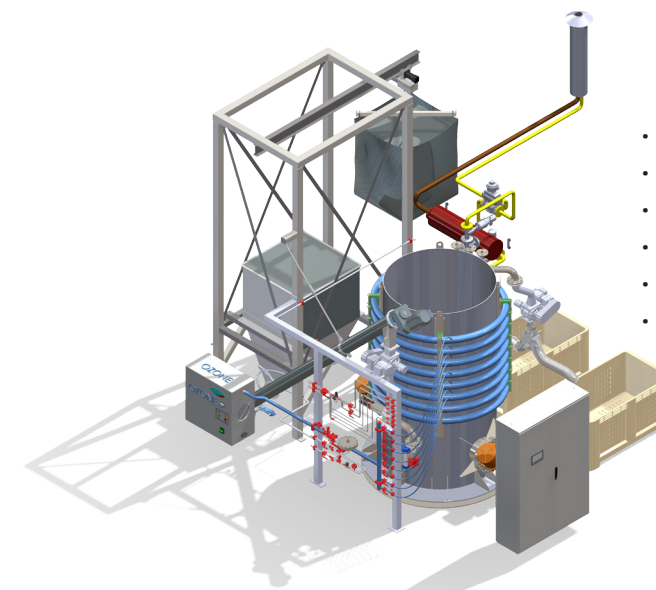
OZOSTERIL - A CONTINUOUS OZONE SANITATION SYSTEM

Ozosteril technology is based on the unique and patented combination of a vibrating conveyor and ozone injector. Ozone is a molecule built out of 3 Oxygen atoms (O₃) and is generated from dried compressed air. It is a powerful oxidant that destroys mycotoxins and pesticides.

Our ozone process is a good alternative to thermal processes for the reduction of mycotoxins and pesticides from cereals and other low moisture food *.

* Good results achieved on mycotoxins and pesticides on rice and wheat.

PRINCIPLE



- Big bag emptying buffer hopper, extraction and dosing screw
- VIBRO FLUIDIZED OZOSTERIL reactor
- Instrumentation (temperature, flow, pressure)
- Control and command cabinet
- CIP for tube cleaning
- Ozone generator and destructor

Ozosteril