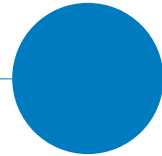


DOGASEPTIC

Cup filling and sealing machine



Hygiene Standards

ultra-clean, aseptic

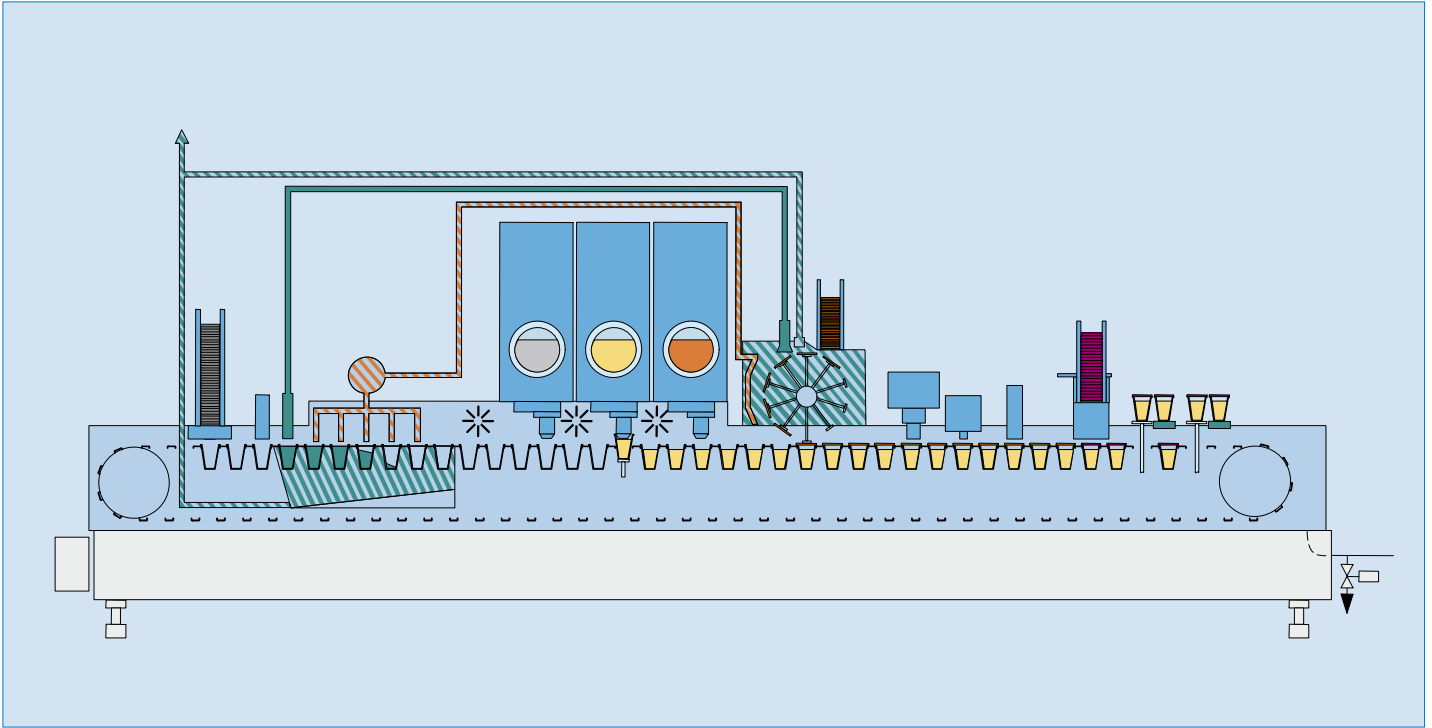
Machine Types

DS 42P, DS 62P, DS 63P,
DS 82P, DS 101P

COMPLETE LINE

We offer the project design of a complete packaging line on the DOGASEPTIC basis comprising:

- cup buffer and feeding systems
- tray erector
- integrated or separate tray packer
- palletizer



Machine overview DOGASEPTIC 61 P, 82 P, 101 P series

Machine Concept

The DOGASEPTIC has the following features:

- completely enclosed machine
- conveyor in an enclosed tunnel with sterile air overpressure
- controlled sterile air supply
- sealed protection doors insulating against H_2O_2 vapour emissions (limit value ≤ 1 ppm), noise etc.
- large windows providing unrestricted observation and full accessibility to the clean area
- packaging material sterilization with safe germ elimination; up to 10^7 bacillus subtilis

Standard Equipment

All parts coming into contact with the product and cleaning agents are manufactured from materials acceptable for foodstuffs.

The standard DOGASEPTIC consists of:

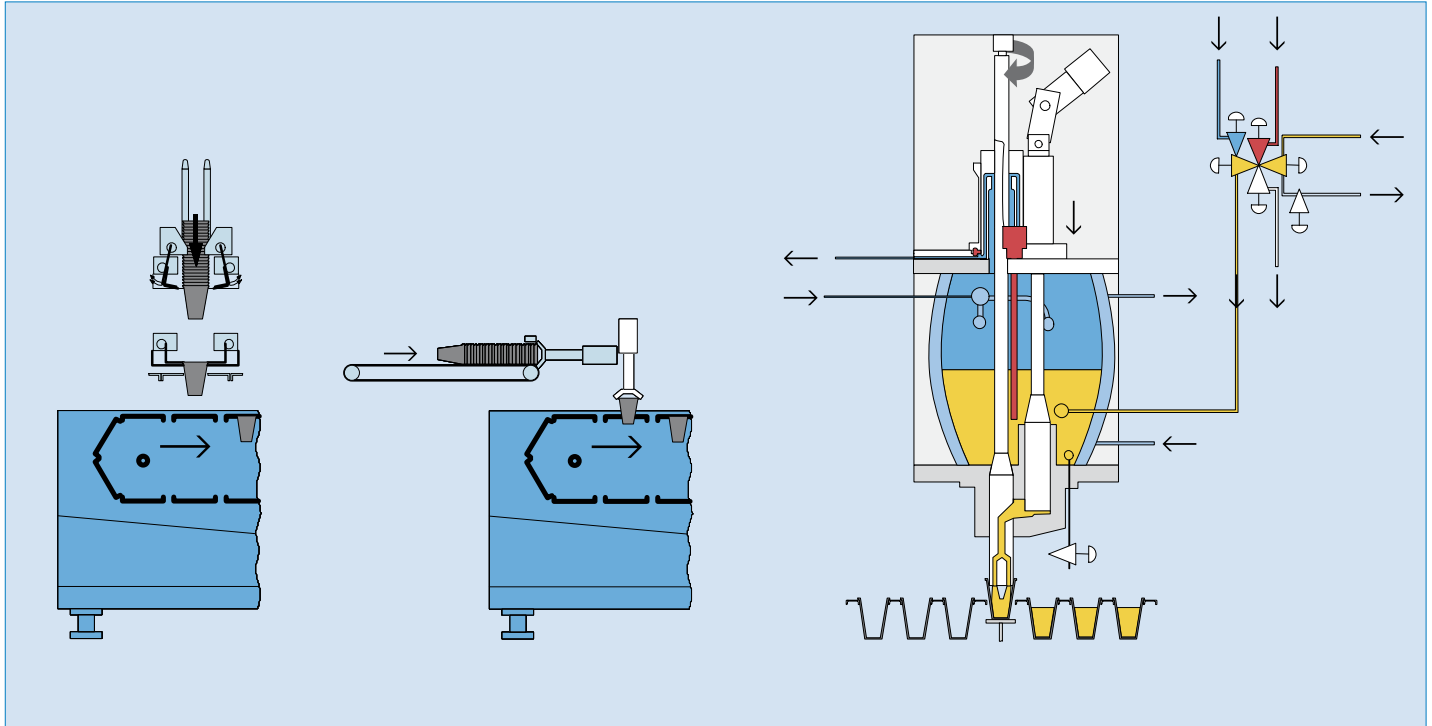
- steam sterilizable aseptic filler with no moving seals (143° C)
- monitor-assisted machine operation (M.M.I.)
- separate switch cabinet
- machine runs from left to right when viewed from the operator side

Optional Equipment

- additional dosing units for multi-layer filling
- special dosing units for spiralled or vertical-layer defined products and other special product presentations
- dedicated CIP preparation unit, type STERIMATIC, for cleaning of the DOGASEPTIC, including sterilization of the entire sterile tunnel by H_2O_2 laden air
- operation data evaluation system
- snap-on lid applicator
- lid seal integrity tester
- specific equipment on request

Cleaning

The DOGASEPTIC is equipped with program-controlled CIP-cleaning and SIP-sterilization. The sequences of the cleaning process are displayed on the M.M.I. and can be optimized, by authorized users, via an access code. OYSTAR Gasti offers the complete cleaning system and controls to be connected to either a dedicated CIP set or an existing central system. Flow rate 30 m³/h at 3 bar overpressure. The cleaning includes the complete product feeding parts from the valve interface to the dosing system, the entire sterile tunnel, packaging material, sterilization equipment and the cell plates. Additional cleaning with acid effectively removes deposits from the H_2O_2 - evaporation system.



Cup de-stacker vertical, with gripping system

Hygiene Standards

The DOGASEPTIC complies with the following hygiene standards:

- ultra-clean
- aseptic

The sterile overpressure chamber is completely separated from the drive elements. Seals and locks avoid reinfection during production.

Cup Buffer and Feeding Systems

- horizontal cup buffer magazine
- vertical cup buffer magazine
- feeding systems from the upper or ground floor

Cup De-stacking Device

mechanical de-stacking

- by means of horizontal or vertical gripper systems
- electronic cup sensing for
- missing cups
- double cups

Cup de-stacker horizontal, with gripping system

Multiple Formats

OYSTAR Gasti offers two kinds of format flexibility:

- exchange of the cell plates, sealing plates etc. for another cup format (upon request)
- two different formats in each cell cup plate, in subsequent rows, changeover time ≤ 30 minutes without loss of sterility of the filler

Filler

- mechanically driven from the main drive
- no moving seals
- extremely high weight accuracy due to piston and valve working within the product
- quick change filling nozzles
- individually calibrated fill pump pistons
- cup lifting/lowering
- **option:** servo drives for filler, cup lifting/lowering

Filler, filling stroke

Fill Products

The DOGASEPTIC is able to fill liquid to pasty products with or without particulates, e.g.

- fermented milk products
- single and multi-layer desserts also spiralled or vertical-layer defined products and other special product presentations
- aerated products
- cream
- fruit preparations/sauces
- fruit desserts
- soft drinks
- **option:** divided product hopper for assorted filling

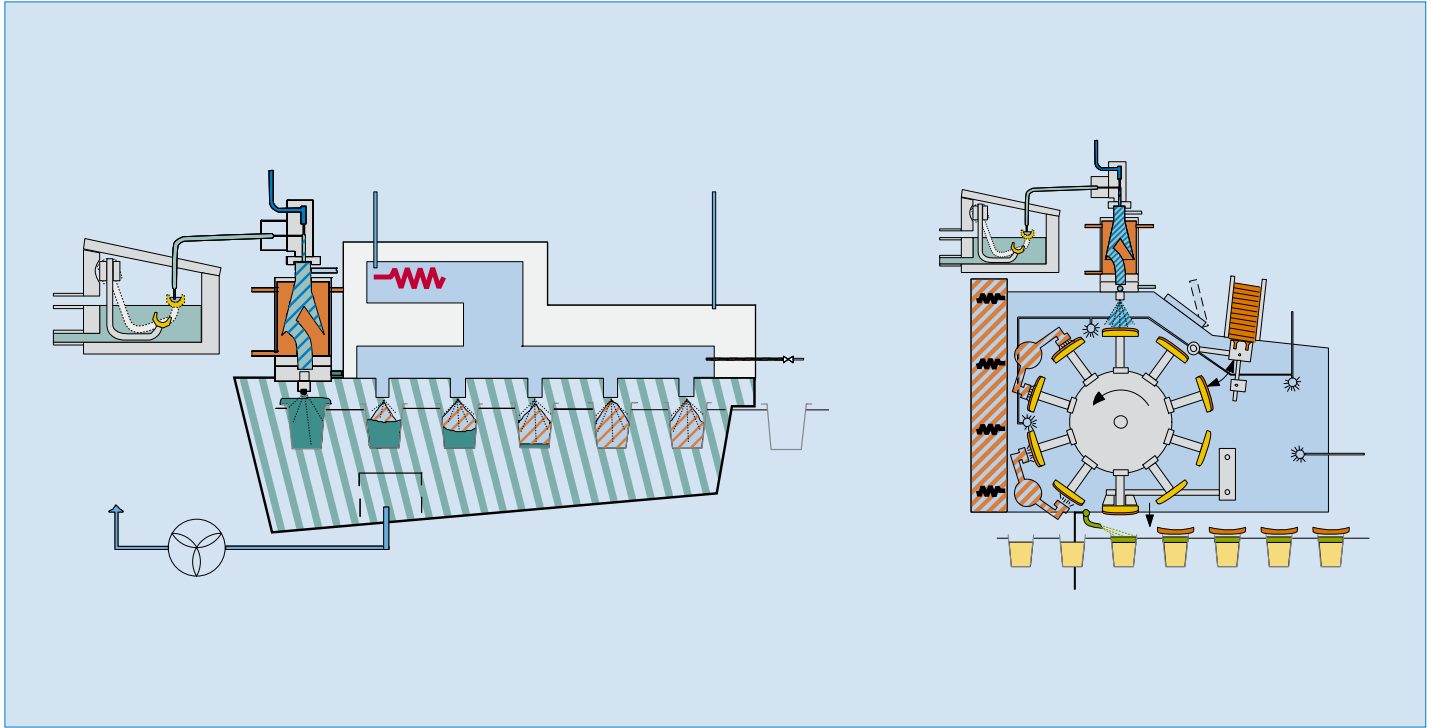
Fill Volume

12 to 125 cm³

25 to 250 cm³

50 to 550 cm³

other filling volumes upon request



Cup sterilization

Packaging Material Sterilization with H₂O₂

- with cyclic dosing of H₂O₂ with alarm function
- sensor for "ladle is filled" and "ladle is empty"
- evaporation of H₂O₂ in special design double-walled heat exchanger
- steam heated H₂O₂ distributor with temperature control
- a syphon provides additional security against H₂O₂ build up in the H₂O₂ distributor
- cup drying with heated sterile air, with by-pass during machine stop
- the angle of the drying air differs at each drying index
- sterilization process in an enclosed chamber with controlled evacuation of H₂O₂ laden air from the machine tunnel

Closures

The following types of closures can be used:

- diaphragm lids made of aluminium and/or plastic material, monofoil
- pre-formed, heatsealable lids made of aluminium, plastic material or monofoil
- re-closable lids made of plastic material (snap-in or snap-on lids)

Lid Applying Station

DS 42 and 62: paternoster principle

DS 63, 82 and 101: wheel principle

- lid magazine
- H₂O₂ treatment of the lids
- hot air drying

Lid sterilization

Heat Sealing

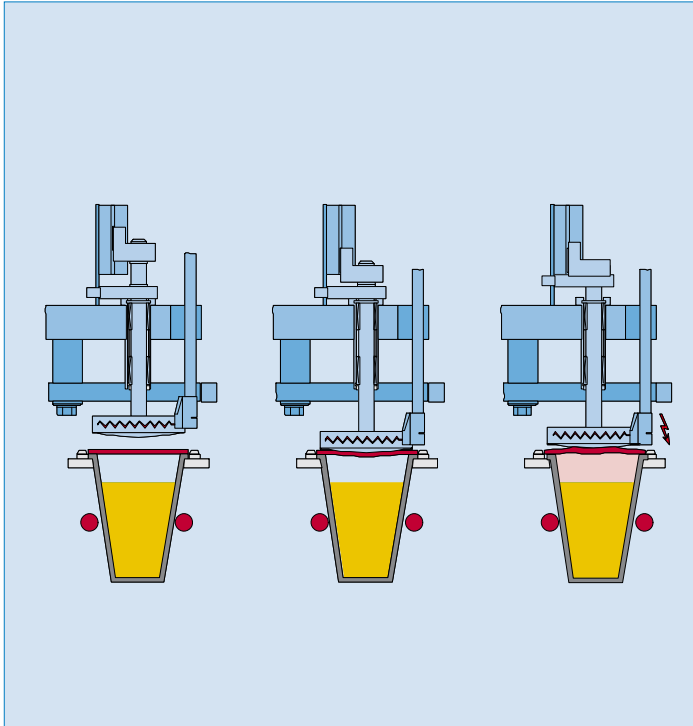
- mechanically driven from the main drive
- mechanical support of the cell plates
- flexing sealing heads
- individual temperature control with alarm features
- thermal insulation between sealing plate and mounting assembly
- a pneumatic raising of sealing heads at machine stop

Technical data

pre-filler	12–125 cm ³ , 25–250 cm ³
main filler	25–250 cm ³ , 50–550 cm ³
post filler	12–125 cm ³ , 25–250 cm ³

Machine type	Number of pumps	Output (cups/h)	max. cup ø*	max. cup height
DS 42P	4	9,600	115 mm	120 mm
DS 62P	6	14,400	75 mm	120 mm
DS 63P	6	14,400	115 mm	130 mm
DS 82P*	8	20,160	95 mm	130 mm
DS 101P	10	25,200	75 mm	130 mm

* format flexible



Cup leakage test device

Cup Leakage Test Device

The cup leakage device works using differential measurement of the lid deflection by creating overpressure in the head space

- thermal (by heating the headspace in the cup)
- alternative: mechanical (by squeezing the cups), or in combined version.

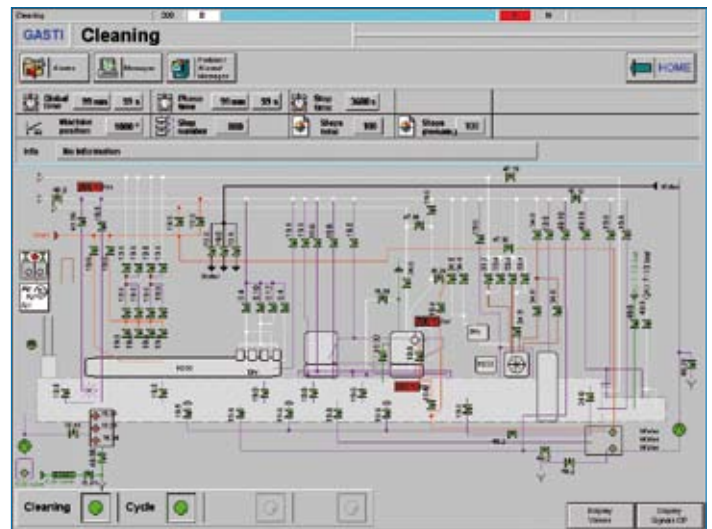
If there is no deflection of the lid, the cup is identified as being untight and separated

Date Coding

- integrated ink jet coding system

Cup Discharge

- cup lift out and mechanical transfer onto a discharge conveyor (separate tray packer, sleeve, etc.)
- combination with an integrated tray packer



Principle control set-up

Operation

State-of-the-art visualization system with different authorization levels. Displays for

- production
- cleaning
- recipe management
- chronological listing of alarm and message texts
- operation data registration (optional)
- adaptation of the servo-cams in the filler area by means of visualization system (optional)

OYSTAR Gasti Delivery Program

- Filling and sealing machines for pre-made cups
 - Continuous and intermittent operation
 - Flexible in size and equipment
 - Multi-layer filling
 - Hygiene standards: standard – hygienic – ultra-clean – aseptic
- End-of-line packaging equipment
- Mixing and feeding pumps
- Second-hand machines

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