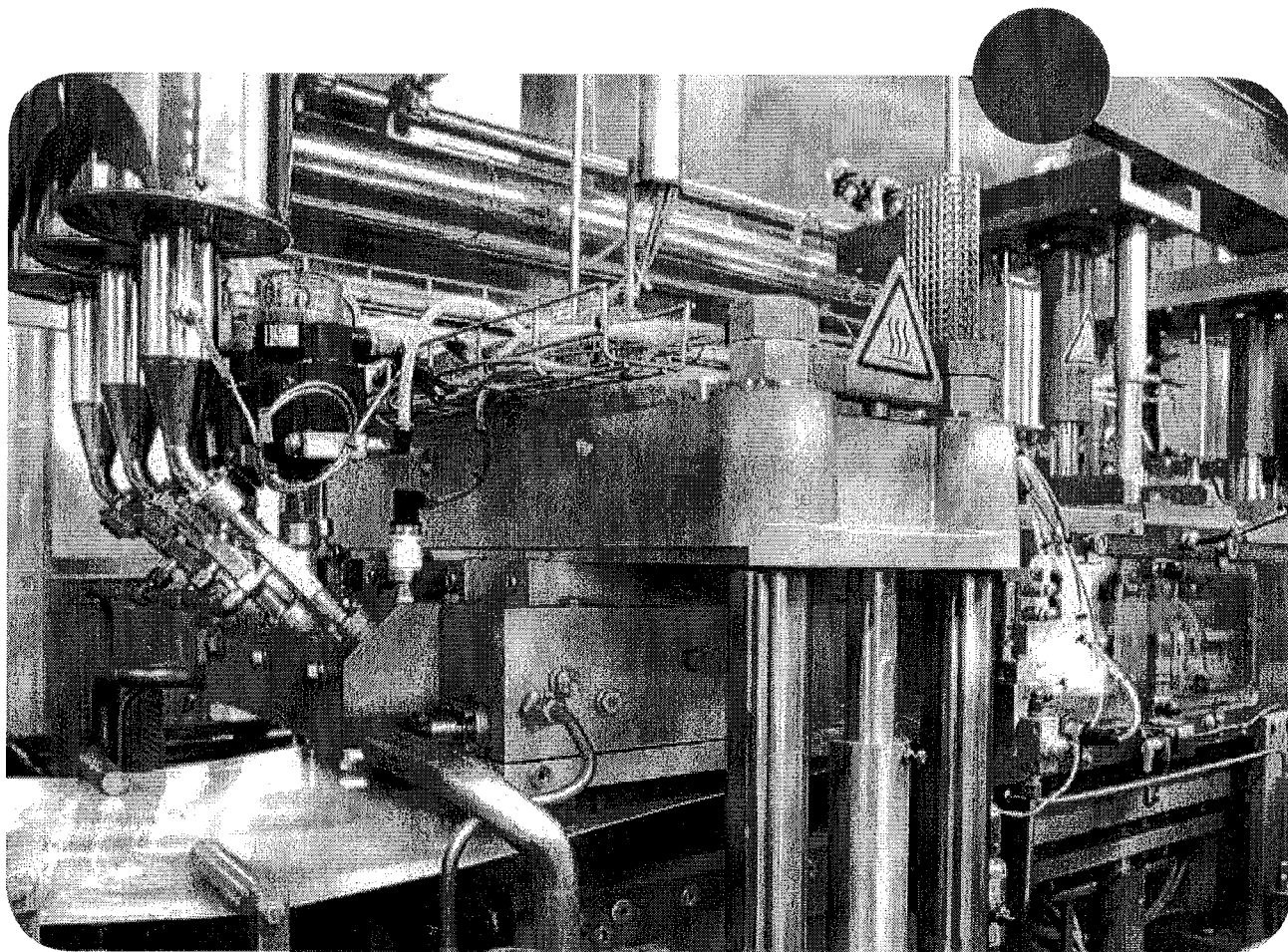


**ASEPTIC –
CUP FORM FILL AND SEAL
MACHINES**
TAS series



- TAS 8/48
- TAS 16/48
- TAS 32/48
- TAS 16/80
- TAS 32/80

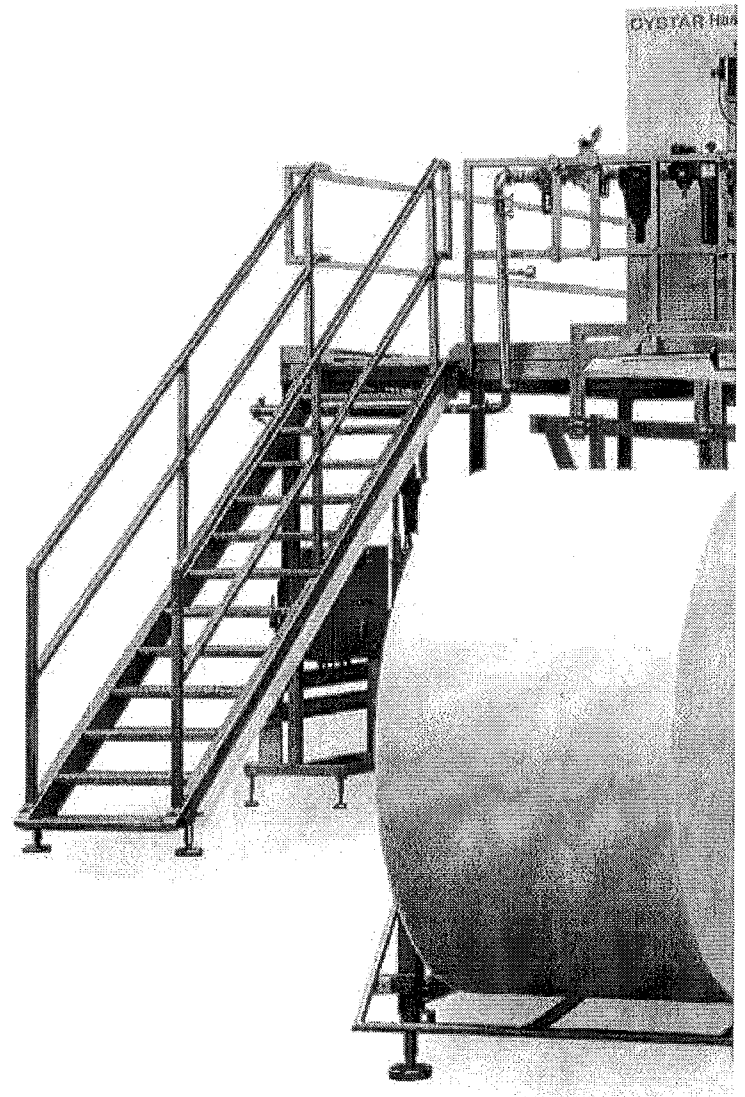
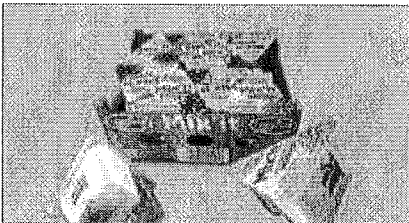
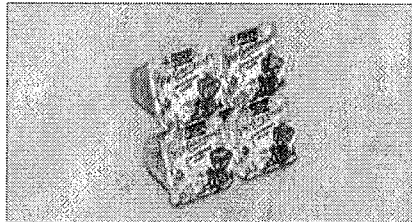
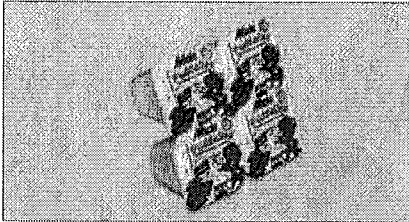
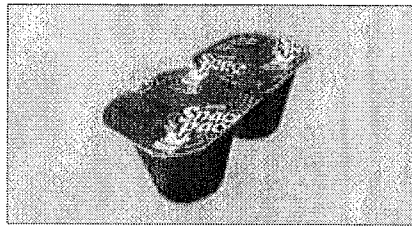
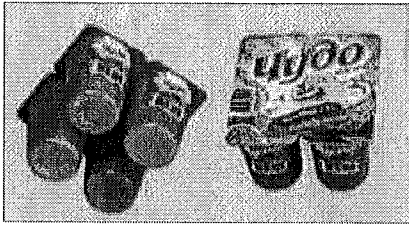
**TAS SERIES OF CUP FORMING, FILLING
AND SEALING MACHINES
EFFICIENT, HIGH-PERFORMING AND
FLEXIBLE**

The requirement to extend the shelf life of high-quality products outside as well as throughout the cooling chain – without a loss of quality – calls for aseptic packaging methods.

OYSTAR Hassia has many years of experience with TAS aseptic forming, filling and sealing machines used in production plants all over the world.

The packaging process can be split into various hygiene classes, depending on the application or the product requirements. Aseptic machines are allocated „hygiene class V“ (VDMA).

Aseptic FFS systems are typically used to fill pH neutral and low acid products (> pH 4,5) which are required to have a relatively long shelf life, without cooling. The basic principle of the aseptic packaging process is to fill packaging material sterilized on the machine with a commercially sterile product, without re-contaminating the product, and to guarantee this status until the cup is hermetically sealed.

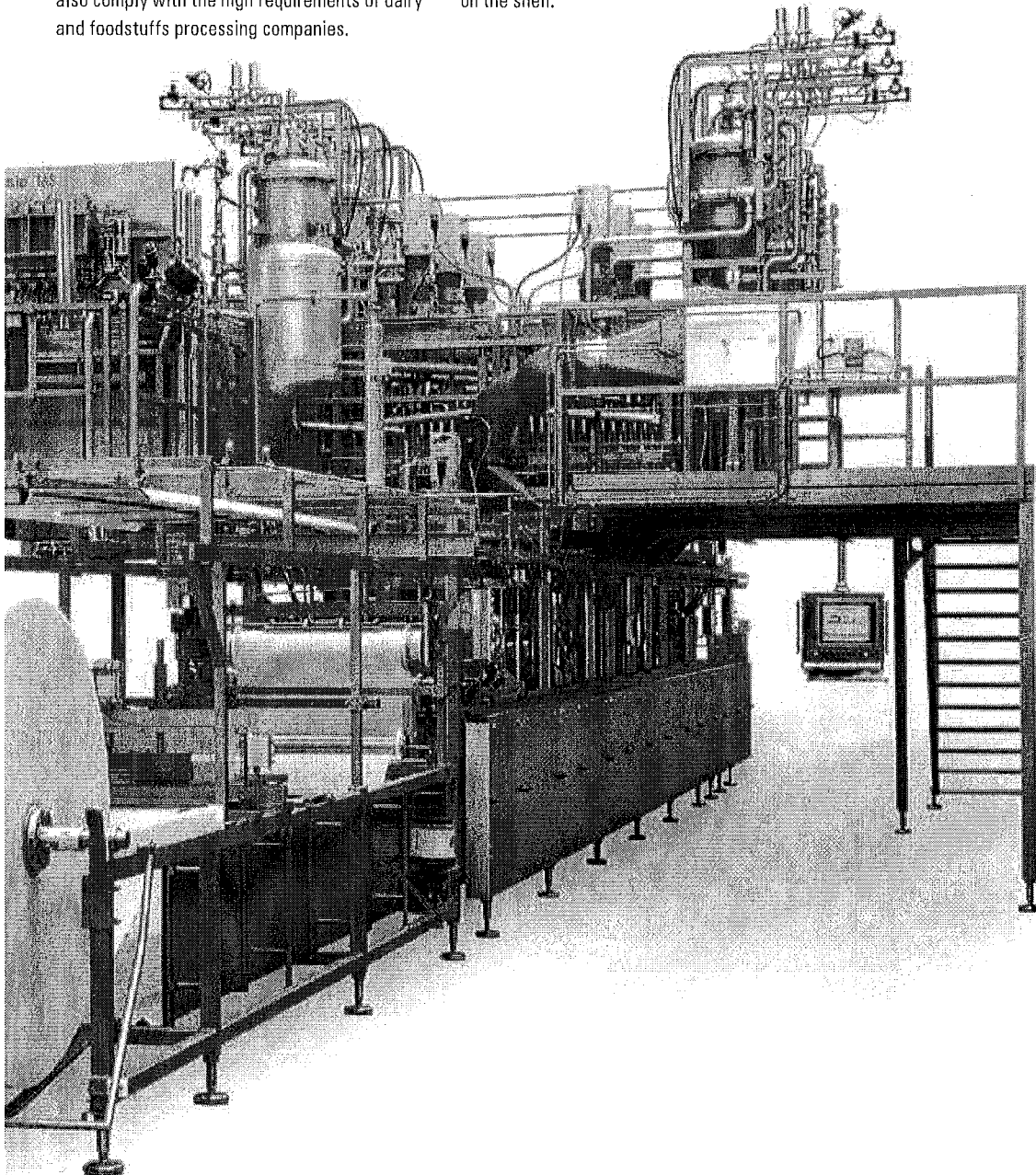


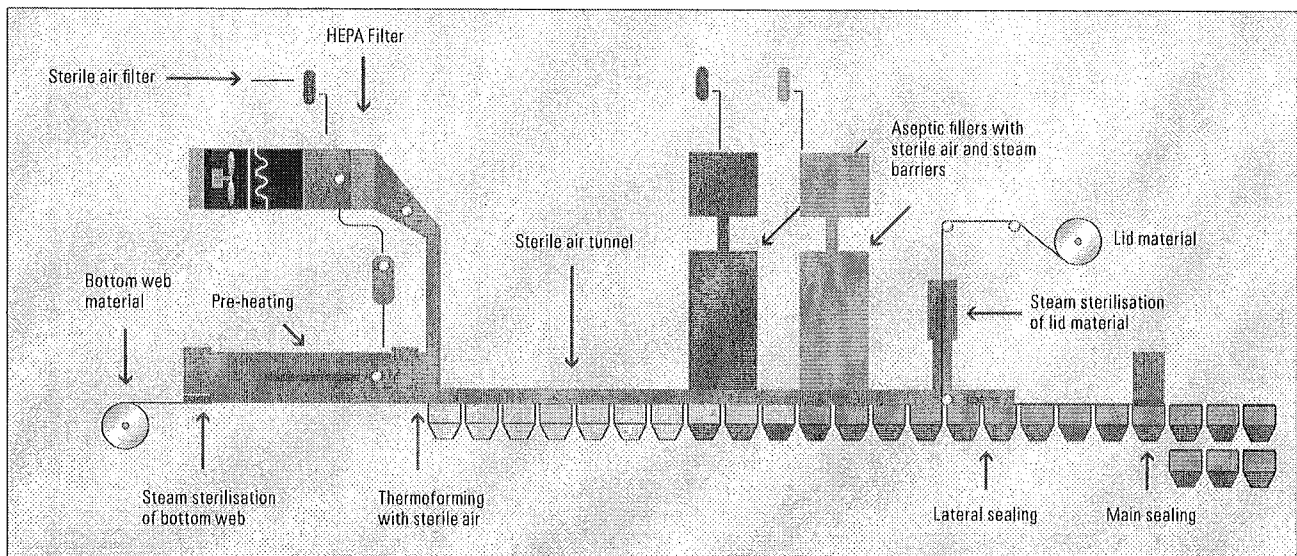
SAFE ASEPTIC OPERATION

The TAS series of OYSTAR Hassia machines complies with all the pre-conditions to control the bacteria on the cup and lid material to $>\log 4$, enabling pre-sterilized products to be filled aseptically and cups to be sealed with perfect reliability.

Optimum processes are an essential factor for increased efficiency. All the function areas of the flexible and high-performance OYSTAR Hassia aseptic solutions are designed with just this requirement in mind, specifically considering the hygienic aspect. Our high standards for operator comfort, control functions and safety also comply with the high requirements of dairy and foodstuffs processing companies.

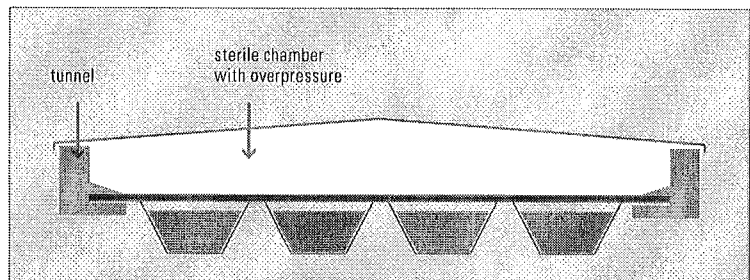
The ASEPTIC systems' carefully devised machine concept enables a versatile expansion of the standard FFS functions. Clever features such as integrated decor systems, the use of several dosing units for multi-component filling and cup coding satisfy the pre-conditions for a wide product range and make your product stand out on the shelf.





The advantages at a glance

- Different cup forms and configurations (e.g. dual cavity cups)
- The ability to process packaging materials which can be recycled
- Fully developed forming, sealing and punching technology
- Perfectly constructed servo technology
- Labelling systems to decorate cups on all sides
- Optimum dosing accuracy and quality
- Safe packaging to ensure that the product quality is maintained
- Extended shelf life and even throughout the cooling chain – without loss of quality
- Compact construction combined with exclusive, reliable construction elements
- Output performance up to 40 cycles a minute
- Complete system concept, from product preparation and product supply up to end – packaging systems



Advantages of OYSTAR Hassia's half-tunnel technology

- small tunnel volume to sustain sterility unproblematic
- possibility for economic INLINE cup decoration with wrap-around label. Cups are accessible from outside.

The main specifications for the TAS series

Size indications	TAS 8/48	TAS 16/48	TAS 32/48	TAS 16/80	TAS 32/80
Draw-off length, nominal	80 mm	160 mm	320 mm	160 mm	320 mm
Working width, nominal	480 mm	480 mm	480 mm	800 mm	800 mm
Max. forming depth	90 mm	90 mm	90 mm	90 mm	90 mm
Nominal output					
Cups/hour	14.400	28.800	46.100	50.400	92.200
Drive technology	Servo-Systems				

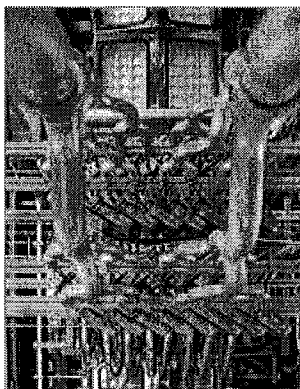
FILLING

The heart of the aseptic FFS technology

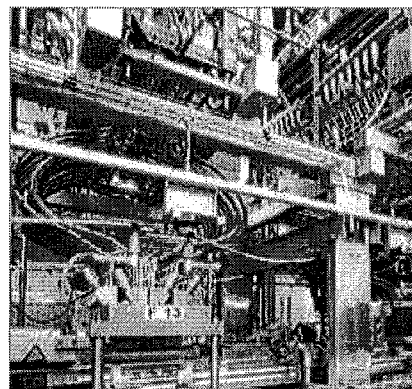
OYSTAR Hassia dosing units are designed and constructed specifically for their intended application in keeping with the relevant product requirements and with a view to the highest dosing accuracy and optimum product safety and quality assurance.

In this respect it does not matter whether only one dosing unit is used or several units, enabling several product variations to be created e.g. swirled products, product with toppings, layered products, two different products or products filled side by side.

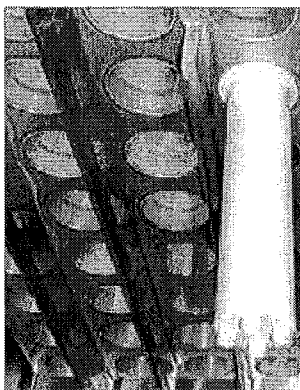
It is worth noting that – depending on product properties, filling volume and size configuration – an enormous production performance of up to 92.200 cups per hour is achieved even with these high requirements.



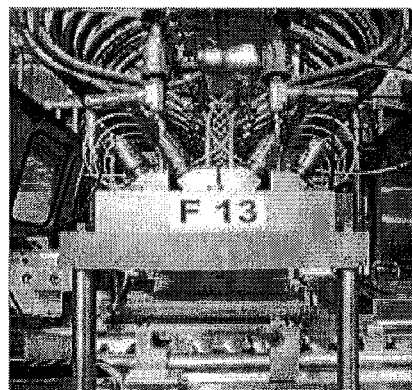
Aseptic filling unit (bird's-eye view)



Layered pudding



Filling nozzle (SWIRL filler)

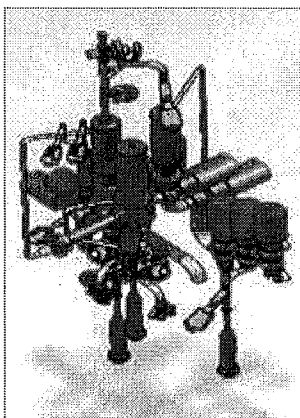


Pudding filler

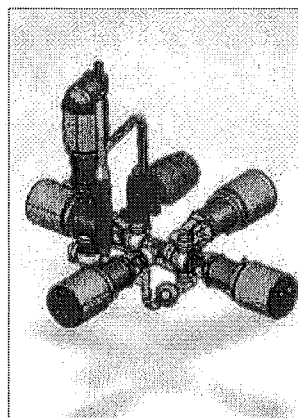
PRODUCT INFEED

Consumers are always into new, innovative products which can only be produced using complex process and filling systems. The design, construction and commissioning of such extensive systems requires optimum coordination and precision!

The OYSTAR Hassia portfolio includes customized solutions for process systems.



Aseptic valve cluster for liquid products

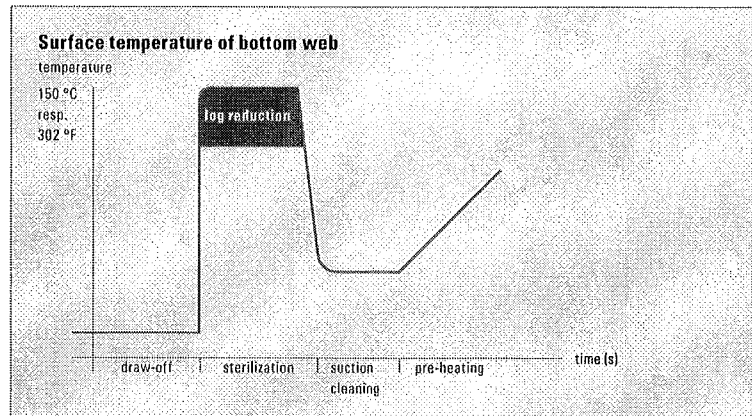


Aseptic valve cluster to transfer viscous products and/or products containing solid particles

SAFE ASEPTIC OPERATION

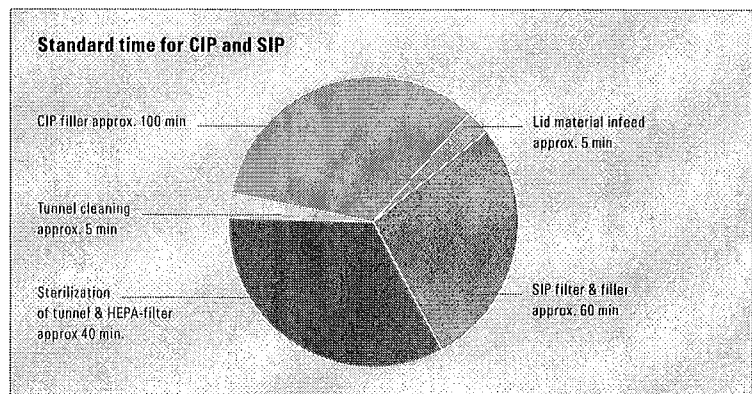
The TAS series of aseptic units works with saturated steam sterilization at approx. 150 °C as developed by OYSTAR Hassia. This technology, which is only used in FFS by OYSTAR Hassia guarantees safe aseptic operation, as confirmed by the American FDA approval, for example.

Many years of experience confirm that steam sterilization – without hydrogen peroxide – is an effective and safe sterilization method. It ensures better package sterility and a longer shelf life. And because no H_2O_2 is needed, more value is generated in production.



CLEANING AND STERILIZATION CIP/SIP

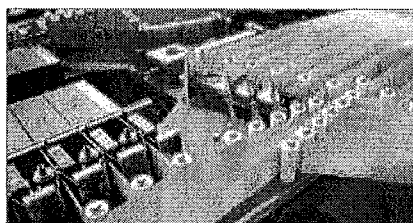
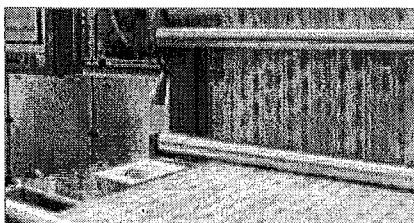
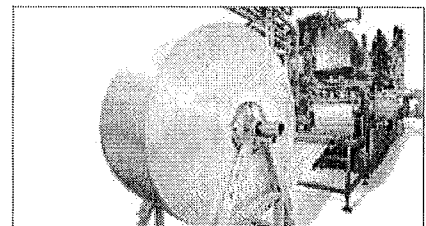
After the end of production or when changing over to another product, cleaning followed by sterilization is required. The 3A conform design considerably contribute in optimized cleaning results. Standard complete cleaning CIP (Clean in Place) takes approx. 100 minutes.



FUNCTIONS

Even standard FFS processes become important elements in highly economic production, thanks to carefully devised concepts. Extremely large reels of material (bottom web and lid material) enable long production runs without interruptions. Operator-friendly positioning of this material near the floor makes it easier to change reels.

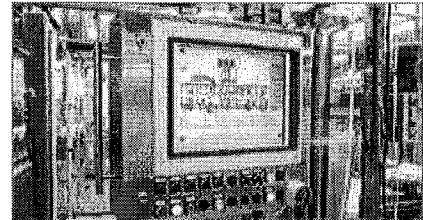
Cup decoration involving labels wrapped around the cups can be performed by means of a double reel supply. This enables different patterns to be processed simultaneously. By making use of separated product infeed or 2 dosing units, different flavors can be dosed, enabling product ranges to be configured as early as during the filling process.



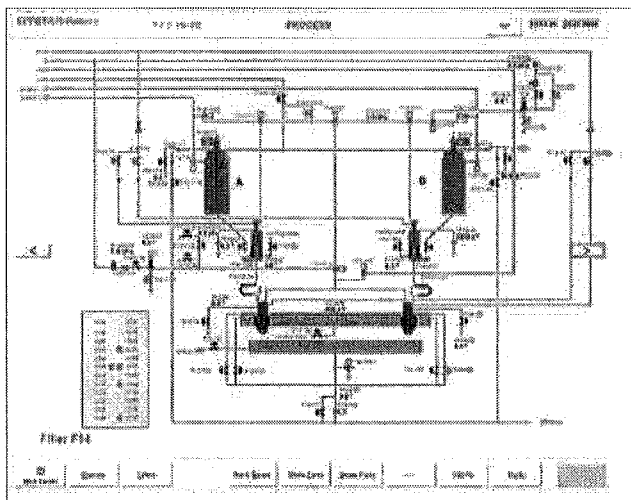
CONTROL

Key characteristics of OYSTAR Hassia control systems, which are of course also featured in the TAS series

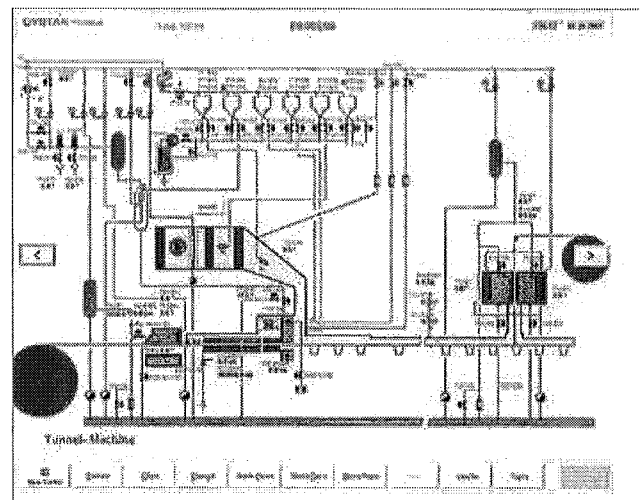
- Standard use of Siemens, Elau and Rockwell Automation systems and the OYSTAR Hassia control
- Greatest flexibility, even with special solutions, such as process monitoring, flow measurement, ultrasound analysis, camera systems etc.
- The possibility to use several field bus systems
- Universal implementation of system vendors' HMI/PLC/Motion Control concepts
- Intuitive, PC-based operating concept
- Graphic display of current machine status and expanded operator assistance
- Integrated information and help system: OYSTAR Hassia Help Desk
- Animated, graphic view of processes
- Easy recipe management and registration with safe user management
- On-screen operation and maintenance instructions
- Data exchange via standard interfaces or customer-specific reports
- Flexible connections to external systems
- Remote diagnosis via internet/VPN/modem with standardized remote control tools
- Integrated PDA/ODA system with its own analysis functions and connection to superimposed data structures
- In-line EAN code check
- Fully developed monitoring and diagnostic facilities



REAL-TIME PROCESS VISUALIZATION



Filler



Machine

SERVICE

OYSTAR Hassia offers a comprehensive package of services to ensure the high availability of your ASEPTIC FFS system.

Our services range from the stocking of standard spare and wear parts and the rapid delivery of size-dependent parts, to the 24/7 deployment of highly qualified service engineers!

To add flexibility to its worldwide provision of spare parts and service, the OYSTAR group has set up service centers in the USA, China and Russia.

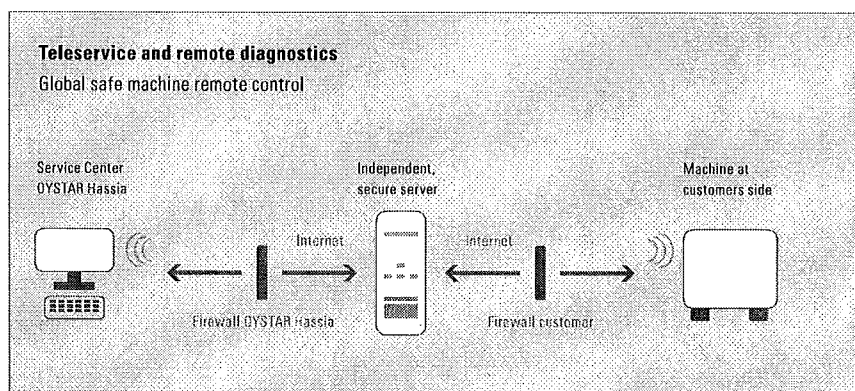
Our service employees make their knowhow and experience available to you for various purposes: new installation, integrating spare parts, overhauling systems or for general service provision.

It goes without saying that we will keep you informed about further developments and technical innovations and that we offer Retrofit solutions for existing systems. We bring existing systems up to date with the latest state of technology by replacing outdated components and adding new, contemporary technological developments. Modernizing existing systems ensures a noticeable increase in productivity, often at relatively low costs.

TELESERVICE

FFS machines offer the latest remote diagnosis systems to ensure the high availability of your ASEPTIC systems:

We make use of the integrated functions of the digital machine controls and the latest new means of communication to enable us to trace the cause of failures and take measures to remedy them, without local service intervention if possible.



TRAINING

OYSTAR Hassia's scope of delivery does not end with manufacturing your FFS system. If required we train also your staff (mechanics, machine operators, maintenance engineers, electronic engineers).

Your employees can become familiar with the system as early as during the final assembly phase and they will obtain further detailed information during the theoretical training sessions, as part of our machine and customer-specific training program.

Our highly qualified and experienced instructors impart knowledge of their comprehensive practical knowhow, forming a basis for the FFS system to be used, cleaned and maintained economically and efficiently.

OYSTAR

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