



## System-based filler hygiene operates

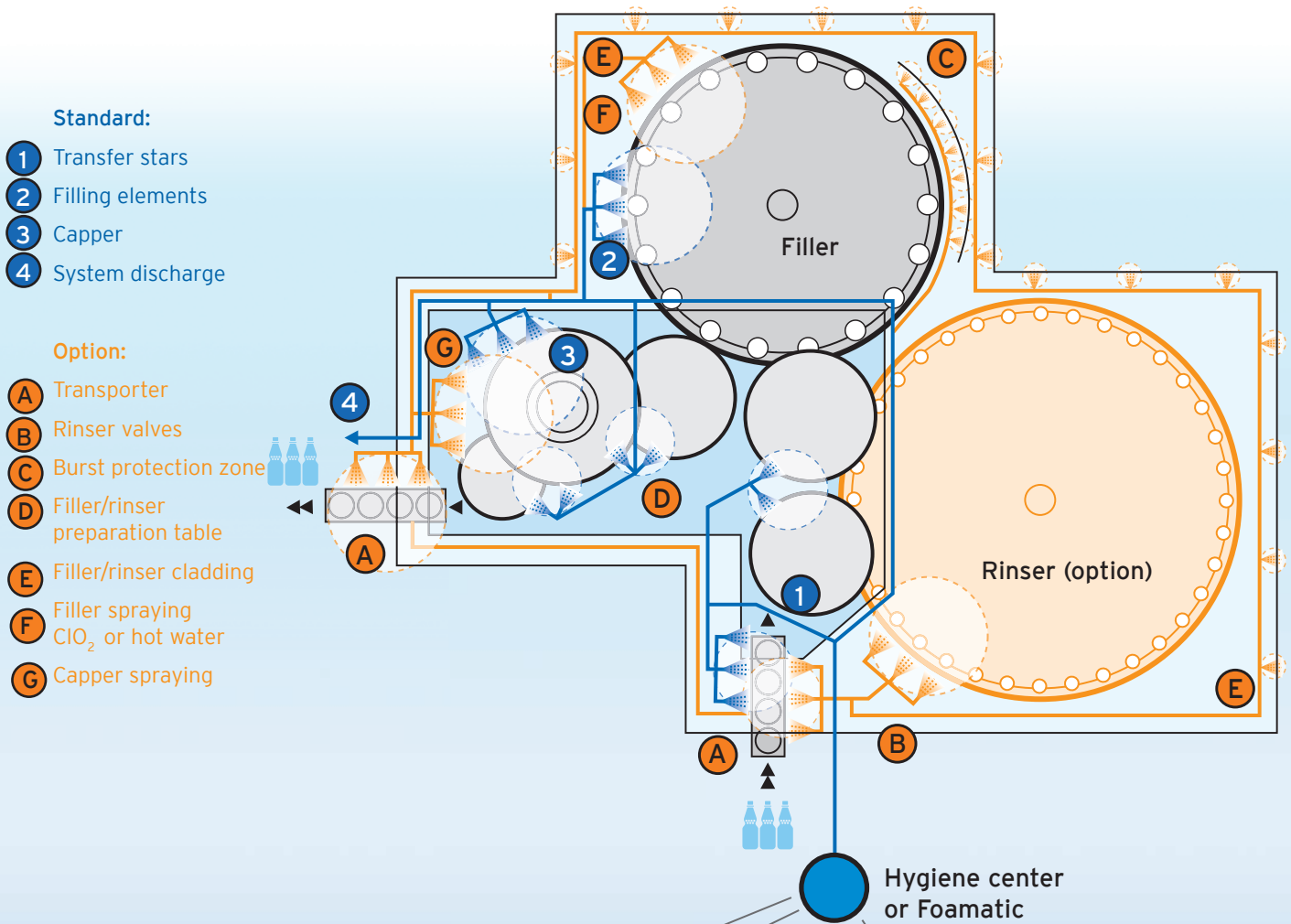
- ▲ **Comprehensively**
  - cleaning and disinfection of all critical parts in accordance with the hygiene plan
- ▲ **Fast**
  - intensive and short hygiene program
- ▲ **Economically**
  - targeted foaming, disinfecting and rinsing of defined hygiene-related areas
- ▲ **Sustainably**
  - regular automatic procedure with reproducible
  - final result

**ECOLAB®**  
Everywhere It Matters.

# Filling hygiene – the sound basis for quality.

The filler system as the core of the filling hall significantly contributes to preserving the quality of the filling. In order to maintain the high hygienic level of this sensitive area in an efficient, effective, sustainable and risk-free way, automatic cleaning and disinfecting systems are an indispensable requirement for all filling facilities.

## The hygiene measures:



### Hygiene center

(with expansion options, e.g., for measurement and metering of peracetic acid)



### BFH-Foamatic



# From cleaning and disinfection procedures to a specific hygiene plan:

Foam-based cleaning either alkaline or acidic.

Once per day, following end of production and at product changes:

Foam ▶ action period ▶ rinse

Foam disinfection or rinsing disinfection

Once per day, prior to start of production and after any manual interventions:

Foam/disinfection ▶ action period ▶ rinse

area:	Cleaning or disinfection		Rinsing	Total time: approx. 15 min
	Foaming or spraying	Action period	Spraying	
Capper / discharge star	[Bar chart showing approximately 40 sec of foaming and 720 sec of action period]		[Bar chart showing approximately 120 sec of spraying]	Total time: approx. 15 min
Infeed and discharge star / filler	[Bar chart showing approximately 40 sec of foaming and 720 sec of action period]		[Bar chart showing approximately 120 sec of spraying]	
Filling elements	[Bar chart showing approximately 40 sec of foaming and 720 sec of action period]		[Bar chart showing approximately 120 sec of spraying]	
	approx. 40 sec	approx. 720 sec	approx. 120 sec	

## Hygienically designed nozzles

A comprehensive new range of nozzles with an appropriate hygienic design is now available for foam cleaning and rinsing of system elements. In each case, the type of nozzle must be selected on the basis of the specific requirements. Thanks to direct cooperation with machine manufacturers, Ecolab possesses comprehensive knowledge and know-how. This enables us to produce customer-tailored hygiene solutions for filler systems. Together with you, we are going to create the right hygiene procedure for your beverage and filler system. Our modular design ensures an economical and sustainable solution that can be implemented in the shortest possible time.



Spray cone



Reversing nozzle



Rotation nozzle



Flat-jet nozzle



Double flat-jet nozzle

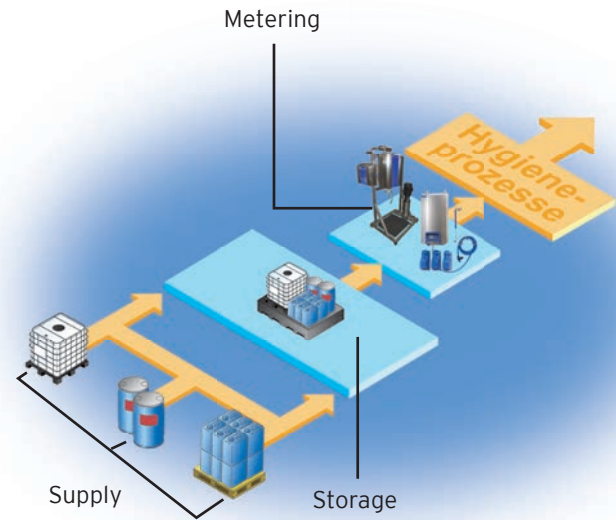
## EcoCare™

Complete system range for staff and facility hygiene



## P3-Protect®

Supply logistics for hygiene products



## Filler hygiene integrated in FillGuard program

- ◆ Inventory, feasibility study
- ◆ Definition of hygiene plan
- ◆ Preparation of quotation
- ◆ Realisation, installation
- ◆ Start-up
- ◆ Staff training
- ◆ Maintenance agreement



Ecolab systems are tailored to your needs, from conceptualization and planning through to implementation.

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