



# Open plant cleaning solutions for the food and beverage industry

Product overview - Manual cleaning



## Combined work- and supply stations MS

Our manual main station MS5 or MS7 is a stand-alone cleaning unit serving as a supply station as well as workstation. It has a built-in satellite for one user to rinse, foam and disinfect, and an integrated, frequency-controlled pump which supply external workstations with boosted water.



	Main stations			
Number of users	Up to 5	Up to 7	Up to 7	
Number of detergents	Up to 4	Up to 4	Up to 4	
Max. working pressure, bar	20	20	25	
Rinse	•	•	•	
Foam	•	•	•	
Disinfection	•	•	•	
Decentral chemical supply	•	•	•	
Central chemical supply	•	•	•	
Hybrid chemical supply	•	•	•	
Function selector	Pneumatic	Pneumatic	Pneumatic	

Available in the following voltage:

• 3x380-500V/50-60Hz

The main stations are available with either one or two outlets depending on variant.



BSP or NPT thread.

#### Workstations 15-25 bar

Our manual satellite range is comprised of three main satellites with all cleaning functions integrated in one unit. Com mon to all is the intuitive operation and the hygienic and service-friendly design. Each satellite is available in multiple variants so you can find the perfect one matching your requirements for a workstation and maintain a high level of food safety.



		Satellite stations	
Number of detergents	1	Up to 2	Up to 4
Pressure range 15-25 bar	•	•	•
Rinse	•	•	•
Foam	•	•	•
Disinfection	-	•	•
Decentral chemical supply*	•	•	•
Central chemical supply	•	•	•
Hybrid chemical supply	-	•	•
Function selector	Mechanical	Mechanical	Pneumatic

<sup>\*</sup>Satellites with decentral chemical supply available as mobile units (trolley mounted)

Satellites available with 1 or 2 outlets depending on variant.

BSP or NPT thread.



#### Boosted water supply: Single pumps, up to 10 users

Getting an accurate water pressure to supply your workstations is key in getting a good cleaning result. With the below op tions, you can choose the variant matching your needs in terms of pressure, flow, number of workstations/users, mounting options and control mode.



	Pump Stations		Booster stations			
					BS2-40	
No. of users/workstations	Up to 5 or 7	Up to 7	1,3,5,7 or 10	Up to 10	Up to 2	2,3 or 5
Control	E-motor	E-motor	E-motor	E-motor	E-motor	Relay
Max. working pressure, bar	20	25	20	25	40	25
Mounting	Wall	Wall	Floor	Floor	Floor	Floor
Stainless steel cabinet	•	•	-	-	-	-





Available in the following voltages (depending on model):

- 3x380-500V/50-60Hz
- 3x230V/50-60Hz (RBS only)

BSP thread, NPT thread or flange connection.



# Boosted water supply: Multi pumps, up to 40 users

Our multi pump booster stations enable the supply of boosted water for up to 40 users/workstations. As with the single pump stations, you can choose the variant matching your needs in terms of pressure, flow, number of workstations/users, mounting options and control mode.



BS30-40

		Booster stations	
	BS20/30/40-20		BS10/20/30/40-40
No. of users/workstations	20, 30 or 40	13, 20, 26, 33 or 40	10, 20, 30 or 40
Control	E-motor	Relay	E-motor
Max. working pressure, bar	25	25	40
Mounting	Floor	Floor	Floor

Available in the following voltages (depending on model):

- 3x380-500V/50-60Hz
- 3x230V/50-60Hz (RBS only)

BSP thread, NPT thread or flange connection





## Chemical pump stations CP

CP is a frequency-controlled chemical pump station mixing the detergent and water in an integrated tank. The prediluted product is then boosted by a chemical resistant centrifugal pump and supplied through the piping system to the workstations.



	Chemical pump stations		
	CP5		
Number of users	Up to 5	Up to 7	
Number of detergents	1	1	
Control	E-motor	E-motor	
Booster capacity, bar	6-8	6-12	
Decentral chemical supply	-	-	
Central chemical supply	•	•	
Hybrid chemical supply	•	•	
Mounting	Wall	Wall	
Stainless steel cabinet	•	•	

Available in the following voltage:

3x380-500V/50-60Hz

BSP or NPT thread.



# Chemical pump stations KPV

KPV is a range of frequency-controlled chemical pump stations mixing the detergent in a mixer-tank integrated on the unit. The prediluted product is then boosted by a chemical resistant centrifugal pump and supplied through the piping system to the workstations.





	Chemical pump stations		
	KPV 100	KPV 150	KPV 400
Number of users	Up to 15	Up to 25	Up to 40
Number of detergents	1	1	1
Control	E-motor	E-motor	E-motor
Booster capacity, bar	6-8	6-12	6-12
Decentral chemical supply	-	-	-
Central chemical supply	•	•	•
Hybrid chemical supply	•	•	•
Mounting	Floor	Floor	Floor

Available in the following voltage:

• 3x380-500V/50-60Hz

BSP or NPT thread.



The MS1-10 is a simple cleaning solution functioning as a workstation supplied with boosted water by an integrated pump. The MSC1-10 model features a compressor for air supply.



	Stand-alone main stations		
Number of users	1	1	
Number of detergents	Up to 3	Up to 3	
Max working pressure, bar	10	10	
Rinse	•	•	
Foam	•	•	
Disinfection	•	•	
Decentral chemical supply	•	•	
Central chemical supply	-	-	
Hybrid chemical supply	-	-	
Function selector	Pneumatic	Pneumatic	

The main stations are available with either one or two outlets depending on variant.

Available in the following voltages (depending on model):

- 1x230V/50Hz
- 1x120V/60Hz (only MS1-10)





# Stand-alone mobile main stations Voyager

Open plant cleaning with our mobile main station Voyager offers a high degree of flexibility in terms of coverage. It is a stand-alone workstation with an integrated pump boosting the incoming water. The Voyager requires connection to mains water and power supply and compressed air (the K variants do not require compressed air as they have a built-in com pressor).



	Mobile main station					
Number of users	1	1	1	1	1	1
Number of detergents	2	2	2	2	2	2
Max working pressure, bar	10	10	20	20	25	25
Rinse	•	•	•	•	•	•
Foam	•	•	•	•	•	•
Disinfection	•	•	•	•	•	•
Built-in compressor	-	•	-	•	-	•
Separate outlet for boosted water	-	-	-	-	•	•

The mobile main stations are available with either one or two outlets depending on variant.

Available in the following voltages (depending on model):

- 1x230V/50Hz (1-10 and 1K-10 only)
- 1x120V/60Hz (1-10 and 1K-10 only)
- 3 x 380-500V/50-60Hz

All Voyagers have coupling connections.



The foamer F1 is used for quick manual sanitation of surfaces.



	Foamers		
		F1 (no air)	
Number of users	1	1	
Number of detergents	1	1	
Pressure range, bar	3-8 or 15-25	3-6	
Rinse	•	•	
Foam	•	•	

BSP or NPT thread.



## Workstations 3-8 bar

Our range of satellites are also available for connection to mains water supply.



		Satellite stations		
		Satellite Stations		
Number of detergents	1	Up to 2	Up to 4	
Water inlet pressure 3-8 bar	•	•	•	
Rinse	•	•	•	
Foam	•	•	•	
Disinfection	-	•	•	
Decentral chemical supply*	•	•	•	
Central chemical supply	•	•	•	
Hybrid chemical supply	-	•	•	
Function selector	Mechanical	Mechanical	Pneumatic	

<sup>\*</sup> Satellites with decentral chemical supply available as mobile units (trolley mounted)

Satellites available with 1 or 2 outlets depending on variant.

BSP or NPT thread.



Our Doorway Sanitizer DWS is designed to reduce or eliminate microbial contamination of food processing areas stem ming from soiled footwear and mobile equipment that may be carrying micro-organisms. It can be applied at entryways into the processing areas or in passageways between areas to prevent cross-contamination.



	Doorway Sanitizer
	DWS
Number of detergents	1
Water inlet pressure, bar	3-8 or 10-25*
Foam	•
Decentral chemical supply	•
Central chemical supply	•
Integrated timer	•

<sup>\*</sup> Depending on variant

Photocell activation available.

BSP or NPT thread.



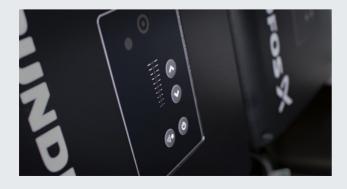
## General product information

Our cleaning equipment and solutions offer a high degree of flexibility in terms of thread and voltages (see below each product). If the options listed do not match your needs, please contact us and we may be able to find a solution.

- Satellites come with rinse nozzle, rinse pipe, foam nozzle, disinfection nozzle, nozzle holder, wall bracket and key (depending on model and variant).
- SC needle dosing valve as standard, except Voyager where the SC click dosing is standard. Fixed or SC click dosing available on request.

- · Alternative nozzle sizes available on request.
- All information on pressure ranges are at a 4 bar inlet pressure.
- The number of user are calculated on the basis of a 30 liter rinse nozzle.
- All equipment with pumps are equipped with energy efficient Grundfos IE5 pump motors.

We offer open plant cleaning equipment and solutions that match any piece of processing equipment and any challen ge you may have.







### System setup

## Central, decentral or hybrid chemical supply?

When you choose an open plant cleaning system for your processing facility, it is essential to consider what the setup of the chemical supply should be. Each processing plant has its own characteristics, and the requirements for a cleaning system depend on various factors:

- · Is it a new or existing processing plant?
- Is there a corporate chemical handling policy dictating that chemicals are prohibited in the production area?

The chemical supply system can be either central, decentral or hybrid. There are advantages and disadvantages to all setups.

A centralised system initially requires a larger investment due to the extensive pipework needed, but subsequent savings on other procedures enables an attractive return on investment. A decentral system is less expensive but provides less consistency in terms of dosing.

# Manual central system



A central solution is characterized by prediluted chemicals being pumped to each workstation from a chemical pump station placed in a separate, central location.

It minimizes the daily handling of chemicals, ensures uniform concentration for all users/workstations and makes operating the system as simple and safe as possible.

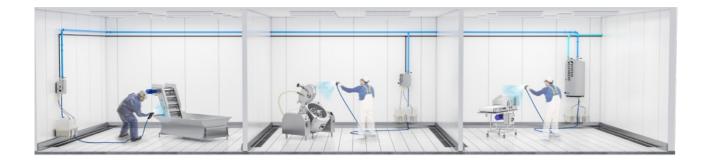
The solution is often recommended in connection with the expansion of production facilities and/or the construction of new.

If the company has a chemical handling policy that prohibits chemicals in the production area, a central setup is the optimal solution.

#### ADVANTAGES OF A CENTRALISED SYSTEM:

- · Efficient and constant chemical consumption: dosing and titration is performed at the central chemical pump station and ensures consistent concentration at all workstations.
- · Safety: the minimization of the daily handling of chemicals improves health and safety for staff.
- The lack of chemical handling also makes the work more efficient as chemical cans will not have to be moved around.
- Cost-effective purchase of chemicals as they can be purchased in larger quantities. It minimizes chemical waste and reduces the use of plastic cans.

#### Manual decentral system



With a decentral solution, the concentrated chemicals are stored and dispensed at each workstation. This can be a main station or a satellite.

All cleaning units can rinse, apply foam and disinfect (depending on the choice of equipment), and the concentration of the chemicals can be adjusted for and at each workstation. Decentral systems can be either fixed to the wall or mounted on a trolley (mobile units). Both wall mounted and trolley models can be used at the same processing site.

The system can be connected to mains water supply or to a boosted water supply from a System Cleaners supply station.

#### ADVANTAGES OF A DECENTRAL SYSTEM:

- Need for less modifications of piping system compared to a central system.
- No need for establishment of centralized chemical storage.
- · Easy to install in existing facilities.

# Manual hybrid system



A hybrid solution has the same setup as a central system but with the additional possibility of adding an extra product at all or some of the workstations. The solution is often applied when there is a need for an extra cleaning task to be performed independently of the regular cleaning program.



# Technology explained: Cleaning with boosted water

The entire System Cleaners range apply low-pressure technology with boosted water. Studies show that it is the most efficient and sustainable way of cleaning difficult surfaces compared to high-pres sure cleaning.

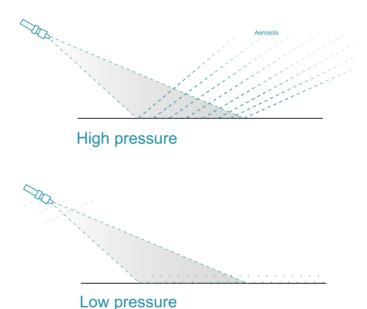
#### SIGNIFICANT ADVANTAGES OF LOW-PRESSURE CLEANING COMPARED TO HIGH-PRESSURE:

- >> Higher rinse impact
- >> More effective removal of residues
- >> Lowest temperature drop
- >> Minimizing cross-contamination

### REDUCED AEROSOL **FORMATION ENSURES**

- >>> Less cross-contamination
- >>> Reduced risk of respiratory and skin diseases
- >>> Improved working environment

High pressure



MORE WATER reaches the surface

RESULT: More effective cleaning and reduction in total water consumption

HIGHER IMPACT of water jet on surface

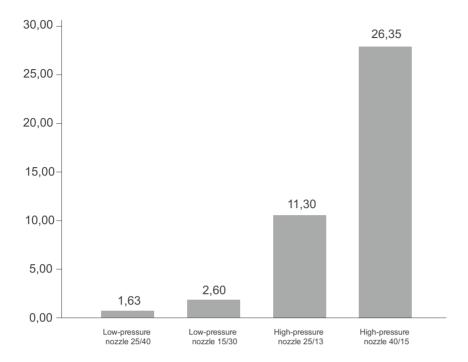
RESULT: Residues loosen faster thereby saving time in the cleaning process

LOWER DROP in temperature

RESULT: A higher temperature improves the ability to dissolve and remove residues



#### RESIDUES AFTER RINSING AT DISTANCE OF 50 CM



The perfect combination of the correct temperature and volume of water in interaction with chemicals means that our solutions are optimised for cleaning the surfaces in all types of food and beverage process ing facilities contaminated with fat, bacteria, yeast, microbes, limescales and other deposits.

This way all surfaces are not only visually clean, but also bacteriologically clean.



LARGER AREA of impact on surface

RESULT: Ability to cover a larger area in a shorter span of time, thereby saving time

LESS AEROSOL formation

RESULT:Less cross-contamination and improved health & safety for staff Low-pressure cleaning with boosted water offers a range of benefits



Significant reduction in cleaning time



Reduced water and chemical consumption



Less wear on processing equipment and affected surfaces



Low maintenance and service requirements



Improved work environment



Better heat transmission



# Enabling you to trust what you eat and drink

When you choose System Cleaners as your partner in open plant cleaning solutions for the food and beverage industry, you'll notice one thing straight away: We don't compromise, and we don't complicate things.

Our high-quality automatic and manual solutions are as solid as they are easy to use and let you benefit from reduced cleaning times and a chance to lower your chemical and water consumption.

No matter what part of the food and beverage industry you are engaged in we'll provide you with the perfect match for your hygiene challenges. No more and no less.

We've been safe-guarding food and beverage brands all over the world for three decades and we can help ensure consistent product quality in your production too. So, say goodbye to sleepless nights caused by poor hygiene and hello to System Cleaners and pure confidence.



Pure confidence

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