

HYBRID 7 THE NEW NORM

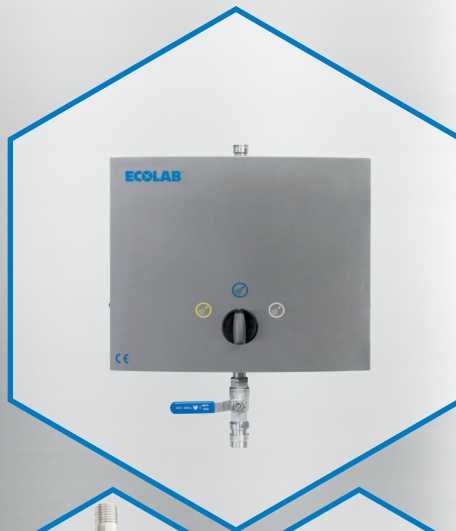
Foam Application Equipment for Open Surface Cleaning in the Food & beverage industry

Innovative producers advance into the world of connectivity. Connecting equipment and factories around the world to create intelligent factories that ensure the highest efficiency, flexibility, quality, and sustainability.

THE NEW NORM is the first step of the way.

Ecolab's **HYBRID 7** foam application equipment lays the foundation for optimal cleaning in the food and beverage industry. Featuring the unique Corona Technology it provides best foam performance for convincing cleaning results.

- Hybrid foam stations combine all cleaning operations in one unit - Rinse, Foam, Spray
- Safe use is supported as application hoses are not to be changed between operations
- Easy handling and hygiene are enabled by robust, smart design
- Double injector block for Advantis foam applications suitable with every station



CONNECTIVITY

Check equipment performance of powered units by various parameters via web & app



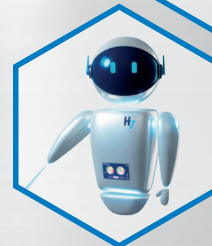
ROBUSTNESS

New polymeric material reducing scaling & corrosion on injectors and non return valves



GUIDED SERVICE

Service partners find step-by-step guidance instantly available at units for doing an expert job



REMOTE SUPPORT

Technicians are enabled to directly connect to the unit for quick help with troubleshooting

Minimize equipment downtime and cost

DECENTRALIZED FOAM SYSTEM

PRESSURIZED WATER | MANUAL APPLICATION

H7 MP42

MAINSTATION:

- ABS cover
- Cost efficient
- changeable injector 150-300 l foam/min



SATELLITE:

- ABS and stainless steel cover



BOOSTER:

- ABS cover
- Pressure from 10 to 25 bar
- water supply 135 l/min



Ecolab's **HYBRID 7 PEGASUS** series is the standard version with all Hybrid 7 features, cost effective and ready for use.

Technical specification:	
Water inlet connection:	clamp ferrule DIN32676 ø 50.5
Water outlet connection:	clamp ferrule DIN32676 ø 50.5
Supply water:	2 - 8 bar 120 l/min
Pump volume:	Max. 25 bar120 l/min
Compressed air supply:	6 - 10 bar 200 nl/min
Electric supply:	380-528 VAC 50/60Hz 5,5 kW
Approvals:	CE
Dimensions H x W x D:	1260 x 550 x 392 mm

Model:	EBS no.:	Cover	Weight
2 products spray/rinse/foam			
MP42	10062115	ABS	96 kg

Technical specification:	
Water inlet connection:	1/2"
Min. - Max. supply water:	12 - 40 bar
Water consumption rinse-foam:	30 l/min - 1,2 l/min
Air connection:	ø 6mm
Compressed air supply:	6 - 10 bar 200 nl/min
Approvals:	CE
Dimensions H x W x D:	363 x 259 x 131 mm

Model:	EBS no.:	Cover	Weight
2 products spray/rinse/foam			
SP2	10033219	ABS	4.3 kg
SP2-ST	10033309	Stainless Steel	4.5 kg

Technical specification:	
Water inlet connection:	clamp ferrule DIN32676 ø 50.5
Water outlet connection:	clamp ferrule DIN32676 ø 50.5
Water supply:	2-8 bar - min. 135 l/min
Supply water temperature:	Max. 70 °C
Electric supply:	380-528 VAC 50/60Hz
Power consumption:	5,5 kW
Maximum outlet pressure:	25 bar
Maximum outlet capacity:	120 l/min
Dimensions H x W x D:	1260 x 550 x 392 mm
Approvals:	CE

Model:	EBS no.:	Cover	Weight
BP4	10062130	ABS	85 kg

H7 MH42

MAINSTATION:

- Stand alone foam unit
- Integrated booster
- Attached to additional satellites for 4 simultaneous users



SATELLITES:

- Modular
- changeable injectors 150-450 l/min foam



BOOSTER:

- supplies water to satellites for simultaneous operatio by several users
- pressure range from 10 to 25 bars
- water supply 135-265 l/min



Ecolab's **HYBRID 7** series is the extendable version in an extra spacious design for additional modules to be added.

Technical specification:	
Water inlet connection:	clamp ferrule DIN32676 ø 50.5
Water outlet connection:	clamp ferrule DIN32676 ø 50.5
Supply water:	2-8 bar 120 l/min
Pump volume:	Max. 25 bar 120 l/min
Compressed air supply:	6 - 10 bar 200 nl/min
Electric supply:	380-528 VAC 50/60Hz 5,5 kW
Approvals:	CE
Dimension H x W x D:	1260 x 550 x 392 mm

Model:	EBS no.:	Functions	Weight
MH42	10062125	2 products spray/rinse/foam	112 kg

Technical specification:	
Water connection:	1/2" threaded connection
Water pressure:	min. 12 bar/max. 40 bar
Air connection:	ø 6 mm
Basic functions:	Foam cleaning, disinfecting and rinsing
Dimension H x W x D:	510 x 402 x 152 mm

Model:	EBS no.:	Functions
SE1	10056233	1 outlet, 1 product, 1x foam
SH2	10022343	1 outlet, 2 products, 1x foam/spray
SH3	10022345	2 outlets, 3 products, 3x foam/spray
SH2R	10022357	1 outlet, 2 products, 2x foam/spray valve
SH3R	10022360	2 outlets, 3 products, 3x foam/spray valve

Technical specification Wall Cabinet:		BH4	BH7
Number of users:	30 l/min	4	7
Supply water:	2-8 bar	135 l/min	230 l/min
Supply voltage:	380-528 VAC 50/60Hz	5,5 kW	10 kW
Outlet water:	20 bar plus inlet pressure	max. 25 bar/max. 120 l/min	max. 25 bar/max. 210 l/min
Housing:		stainless steel	
Dimension H x W x D:		1260 x 550 x 392 mm	1260 x 550 x 392 mm
EBS no.		10062134	10062132
Technical specification Floor frame:		BF4	BF8
Number of users:	30 l/min	4	8
Supply water:	2-8 bar	135 l/min	265 l/min
Supply voltage:	380-528 VAC 50/60Hz	5,5 kW	11 kW
Outlet water:	20 bar plus inlet pressure	max. 25 bar/max. 120 l/min	max. 25 bar/max. 240 l/min
Frame:		stainless steel	
Dimension H x W x D:		1210 x 535 x 392 mm	1210 x 535 x 392 mm
EBS no.		10062136	10062135

chem. Reg. = chemical regulators

PRESSURIZED WATER | AUTOMATIC

HYBRID 7 FOAMATIC

MAIN STATION:

- PLC with HMI touch panel for flexible and intuitive programming
- Integrated 300 L injector
- Interchangeable injectors 150-300-45 l foam/min



SATELLITE:

- PLC with HMI touch panel for flexible and intuitive programming
- Interchangeable injectors 150-300-450 l foam/min



Ecolab's **HYBRID 7 FOAMATIC** series is a unit for automated foam cleaning. The unit is available with or without controller. The controller can control up to 48 external valves.

Model:	MA2	MA2M	MA2i	MA2iM	MA3	MA3M	MA3i	MA3iM
EBS no.:	10059595	10059594	10059599	10059603	10059593	10059592	10059598	10059602
Controller:	-	-	●	●	-	-	●	●
Manual Hybrid block:	-	●	-	●	-	●	-	●
Number of detergents:	2	2	2	2	3	3	3	3

Technical specification:	
Water inlet/outlet connection:	clamp ferrule DIN32676 ø 50.5
Water supply:	min. 240 l/minute, min./max. 2-8 bar., max. 70 °C
Pump pressure:	max. 15 bar. (12 bar. + inlet pressure)
Water consumption:	rinsing 0-240 l/minute, foaming and disinfection 10-32 l/minute
Compressed air Min./max. inlet pressure:	5 - 10 bar. / 200 - 450 nl/minute
Compressed air connection:	1/4"
Electric supply/Power consumption:	380-528 VAC 50/60Hz 5.5 kW / 20A
Dimensions/weight:	(HxWxD) 1260x560x400 mm / 96Kg

Model:	SA2i	SA2iM	SA3i	SA3iM	SA2	SA2M	SA3	SA3M
EBS no.:	10059601	10059597	10059600	10059596	10039528	10039537	10039533	10039541
Controller:	●	●	●	●	-	-	-	-
Manual Hybrid block:	-	●	-	●	-	●	-	●
Number of detergents:	2	2	3	3	2	2	3	3

Technical specification:	
Water inlet/outlet connection:	clamp ferrule DIN32676 ø 50.5
Water supply:	min. 300 l/minute, min./max. 2-25 bar., max. 70 °C
Water consumption:	rinsing 0-300 l/minute, foaming/disinfection 10-32 l/minute
Compressed air Min./max. inlet pressure:	5 - 10 bar. / 200 - 450 nl/minute
Compressed air connection:	1/4"
Electric supply/fuse:	380-528VAC 50/60Hz 0.5 kW / 10A
Dimensions/weight:	(HxWxD) 530x400x140 mm / 40 Kg

PRESSURIZED WATER | MOBILE

HYBRID 7 TYPHOON

- Mobile robust industrial design
- Integrated booster and water pump supplying max 25 bar
- Interchangeable injectors 150-300 l foam/min



Ecolab's **HYBRID 7 TYPHOON** is a complete mobile hygiene station provides all features of a fix station in a very flexible design. The easy to manouver station allows cleaning also small production areas difficult to reach.

Technical specification:	
Water inlet connection:	3/4"
Min./max. supply pressure:	2-4 bar
Max. temperature:	70 °C
Water outlet connection:	pressure locked quick coupler
Compressor:	6- 10 bar 120 nl/min
Max. operation time:	1 h (foaming)
Control voltage:	24 VDC
Approvals:	CE
Dimensions H x W x D:	690 x 1445 x 1030 mm

Model:	EBS no.:	Max. outlet pressure Max. pump capacity:	Weight
Electric supply*: 3x400V 50/60Hz 2,2 kW			
MT	10036330	25 bar/50 l/min	120 kg
MT-U	10036332		
Electric supply*: 3x400V 50Hz 7,5kW			
MT-40B	10036342	40 bar/60 l/min	140 kg
MT-U-40B	10036344		

*other voltages available

CENTRAL FOAM SYSTEM

HYBRID 7 PENTA

Ecolab's **Hybrid 7 Penta** is designed for the local application of centrally supplied pre-diluted cleaning products in order to eliminate concentrated agents in the production area. This supports food safety and environmental hygiene in food and beverage processing facilities.

SATELLITE:

- Designed for local applications of centrally supplied pre-diluted application solutions
- Safe - no chemical handling by operators
- full flexibility
- can be extended by foam injector blocks if local pick up is required



Technical specification:	
Water inlet/outlet connection:	1/2" / quick coupling (pressure locked)
Rinse water supply:	8 - 30 l/minute, 12 - 40 bar., max. 70 °C
Prediluted product supply:	5 - 8 l/minute, 7 - 13 bar., max. 40 °C
Compressed air connection:	push in fitting ø 6mm
Compressed air min./max. inlet pressure:	6 - 10 bar. / 200 - 450 nl/minute
Dimensions/Weight:	(HxWxD) 530x400x140 mm / 7 Kg

Model:	SH11PD22	SH21PD22	SHPD21	SHPD22	SHPD32	SHPD22DW
EBS order no.:	10051869	10051870*	10052652	10051868	10051867	10051866
Prediluted products:	2	2	2	2	3	2
Local pick-up products:	1	2	-	-	-	-
Functions:	Rinse water Foam prediluted 1 Foam prediluted 2 Foam local	Rinse water Foam prediluted 1 Foam prediluted 2 Foam local Spray local	Rinse water Foam prediluted Spray prediluted	Rinse water Foam prediluted 1 Foam prediluted 2	Rinse water Foam prediluted 1 Foam prediluted 2 Spray prediluted	Rinse water Foam prediluted 1 Foam prediluted 2 Rinse water 2

* this unit has two outlets

MIXSTATIONS

Ecolab's **MIX STATIONS** are designed for the centralized supply of pre-diluted application solutions.

To make the grade of Food Safety, hygiene and environmental requirements in the Food and Beverage industry cleaning and disinfection solutions can be prepared in and distributed by Mix stations that are located outside the production areas.

A Mix station incorporates a hydraulic dosing pump, a buffer tank and a booster pump. The application solution is pre-diluted in the buffer tank and is distributed on demand to the foam generating consumption point e.g. Hybrid Penta Satellites.

- Up to 25 simultaneous user on one Mix Station
- 200 l buffer tank; 50-120 l foam/min
- Dosing pumps incorporated
- Accurate dosing between 0,2-2% or 1-5%



Model	MIX10 AF*		MIX10 VF*		MIX25 AF*		MIX25 VF*	
Concentration solution ⁽¹⁾	0.2-2%	1-5%	0.2-2%	1-5%	0.2-2%	1-5%	0.2-2%	1-5%
EBS no.:	10051923	10051921	10051922	10051920	10051927	10051925	10051926	10051924
Number of users simultaneously ⁽²⁾ :	10				20			
Number of products:	1							
Content Mix tank:	200 l							
Dosing pump:	Hydraulic driven Dosatron pump							
Sealings:	ETPS		Viton		ETPS		Viton	
Water inlet - outlet connections:	1.1/2" INT - 1.1/4" EXT							
Water supply:	min. 60 l/min - max. 40°C				min. 150 l/min - max. 40°C			
Prediluted product output ⁽³⁾ :	50 l/min - 8 bar				140 l/min - 8 bar			
Concentration solution:	0.2-2% or 1-5% ⁽¹⁾							
Electric supply voltage:	3/PE 380-500V - 50/60Hz							
Electric control voltage:	24V DC							
Electric power/nominal current:	4.0 kW / 11A							
Dimensions (HxWxD) / Weight:	1500x1300x600mm/97 kg				1500x1300x600mm/100 kg			

* AF - VF = alkaline - acid compatible sealings / ⁽¹⁾ 0.03-0.3% on request / ⁽²⁾ icw Hybrid Penta satellite / ⁽³⁾ standard 8 bar., max. 13 bar through Grundfos dongle

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