

HygroMATIK® SPA

member of CAREL group

CAREL

Steam generators
for spa and wellness treatments

FlexLine Spa

Flexible.
Hygienic.
Efficient.

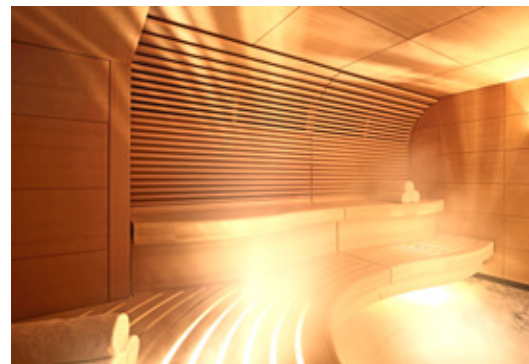


The HygroMatik FlexLine as a modular system

HIGH FLEXIBILITY IN AWARD-WINNING QUALITY



Courtesy of Faena Hotel, Miami Beach. Photographer Nik Koenig. Design and Implementation by Design for Leisure.



CUSTOM-MADE FOR EVERY AREA OF APPLICATION

The basic FlexLine model is the basis for all other configuration options. Thanks to its customisable features, the FlexLine can be adapted to the requirements of various applications in spa and wellness areas, e. g.

- in spa and wellness hotels
- in fitness clubs and gyms
- on cruise ships and in offshore facilities
- in private spa areas
- and many more



FLEXIBILITY PAYS DIVIDENDS

The HygroMatik FlexLine represents a modern generation of steam generators which consists of a basic model that can be expanded to create an individual solution suitable for all steam requirements.

Advantages:

- Ease of installation by means of individual pre-configuration ex factory
- Expansion options for retrofitting
- You only invest in the functions you really need

In order to make this flexibility available to you quickly, we have developed a modular system. This was awarded in three categories and the FlexLine received the **Plus X Award**.

The HygroMatik FlexLine as a modular system

PERFECTLY CUSTOMIZED, OPTIMALLY EQUIPPED

USING THE BEST METHOD FOR OPTIMUM STEAM PRODUCTION

FlexLine is available as an electrode as well as a heater element generator – depending on your water quality and the required degree of control accuracy.



Replaceable stainless steel large area electrodes for different conductivities



Resistor type heater elements in highly corrosion-resistant alloy

ALWAYS THE RIGHT PERFORMANCE FOR A RICH STEAM PICTURE

Equip HygroMatik FlexLine with the power you need for optimum steam output. Performance classes with steam output from 10 lbs/h to 300 lbs/h are selectable in 6 unit sizes. In addition, individual performance adjustments can be programmed both at the factory and on site.



MANIFOLD OPTIONS FOR SOLUTIONS THAT FITS PERFECTLY

Even the basic version of our FlexLine series is characterized by solid basic functions, long operating times and a long service life. But every installation is different, and so every project places unique requirements on steam production. As an option, all FlexLine units can be customized at the factory **with over 100 additional function combinations** to meet the needs of the installation environment. Most FlexLine options can also be retrofitted or activated later. This means that you only invest in the steam generator version that you actually need. In addition, various protection and security functions can be installed and activated, e.g.

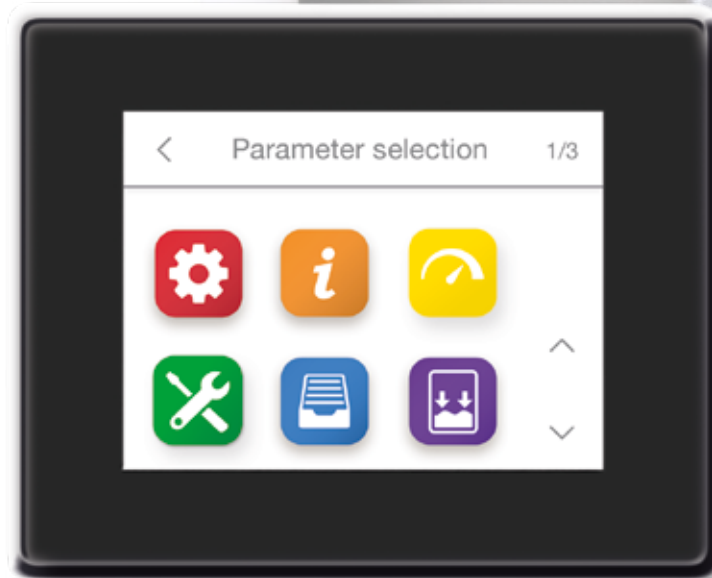
- HyFlush (cylinder flushing device)
- HyCool (integrated waste water cooling)
- HyLevel (water level sensor for electrode generators)
- Stub line flushing
- Communication via BACnet/Modbus
- Safety release on 12V / 24V / 230V
- Electrode version with demineralized water

This means that your system is optimally protected around the clock and you have less maintenance work. If needed, all options can be retrofitted. We are always pleased to provide advice.



Benefit from extensive functions

POWERFUL, SMART AND EFFICIENT



EXCELLENT EASE OF OPERATION

All HygroMatik FlexLine units are equipped with a capacitive 3.5" touch display. Operation and programming are selected via a flat and intuitive menu structure analogous to modern smartphone logic. In addition to this, subsequent software updates are quickly and easily possible via USB flash drive.

- At a glance comprehensible pictographs provide information on the operating condition
- Simple and fast navigation
- Information and system messages displayed as plain text
- Readout of service messages with date and time
- Integrated real-time clock
- Optional: Spa Touch Remote Control – 5" or 3.5" display for external control



Spa Touch Remote Control
5" Display

Touchscreen extern 3.5"



SMART CONTROL – POWERFUL AND QUICK RESPONSE

The control and regulation technology of FlexLine units provides extensive possibilities that are simple and easy to operate.

- **Highest regulating accuracy and top protection** against excessive temperatures by means of second supply air and ventilation steam bath fan
- The option of up to **4 different lighting scenarios**
- Flexible switchover of up to **4 essences** without changing containers
- Freely programmable, overload-protected **digital input**
- **Optional communication** protocol Modbus RTU or BACnet
- **Numerous control and reporting functions** can be assigned to up to 11 relays depending on the unit



COMPREHENSIVE SERVICE FUNCTIONS

We have equipped the HygroMatik FlexLine with intelligent service functions for operational safety. These provide a high level of safety, reliability, control and comfort.

- **Reliable:** Preventive maintenance through permanent monitoring and intelligent evaluation of operating parameters can avoid unplanned downtimes
- **Convenient:** Detailed messages enable deviations to be identified and rectified more quickly
- **Simple:** The diagnostic mode can be started directly via the touch display without commissioning the unit completely
- **Flexible:** Service intervals can be calculated by the unit according to time as well as the amount of steam produced

Optimized unit performance for efficient utilisation

HIGHLY EFFICIENT, EASY TO MAINTAIN

DEVELOPED FOR LONG LIFE

As with all our products, the HygroMatik FlexLine has been developed for an especially long life. The units feature technologies that not only reduce the amount of maintenance required, but also the wear of components. In addition, they are highly efficient with energy and resources.

- **Adjustable power limitation** from 25 - 100%
- **Adjustable load shedding** to temporarily adapt operation to the respective load conditions
- Active energy saving with the **ECO function** and flexible adjustment of the timer functions
- **Long-term continuous operation:** A robust base material provides our reusable cylinders with high temperature resistance and dimensional stability
- The **split cylinder** is easy to open and can be cleaned without using chemicals
- **Extremely durable:** All FlexLine cabinets are manufactured in corrosion-resistant stainless steel; the powder coating of the housing increases the lifespan and offers optimum work safety
- **Robust blowdown pump** for removing scale deposits to ensure long operating life cycles and minimal maintenance
- Highest safety standard for electrode steam generators due to integrated **mechanical circuit breaker and mechanical safety temperature limiter** for heater type steam generators
- Heater type steam generators with **capacitive proportional water level sensor** without wearing parts

When operated with **demineralized water**, the buildup of scale-forming deposits is reduced to a minimum, which allows for a significantly longer operating period between maintenance intervals. For the electrode version, the "Operation with demineralized water" option is required.



For the sake of
the environment

Active energy saving
with the **ECO function**

Robust and
durable cabinet

Reusable
steam cylinders

Long and flexible
service intervals

High resource
efficiency



FlexLine electrodes technical data



FlexLine heaters technical data

A higher humidification performance is possible by connecting units together.														A higher humidification performance is possible by connecting units together.												
Electrical supply ⁽¹⁾	Type	FLE05	FLE10	FLE15	FLE20	FLE25	FLE30	FLE40	FLE50	FLE65	FLE80	FLE100	FLE130	FLH03	FLH06	FLH09	FLH15	FLH25	FLH30	FLH40	FLH50	FLH60	FLH80	FLH100		
208-240 VAC / 1 / N / 50-60Hz	Steam output [kg/h]	4.2-4.8		7.8-9.0		16.6-19.2								2.5-3.3	4.9-6.5											
	Steam output [lbs/h]	9.2-10.6		17.2-19.8		36.5-42.3								5.5-7.3	10.8-14.3											
	Rated power [kW]	3.1-3.6		5.9-6.8		12.5-14.4									1.8-2.4	3.7-4.9										
	Rated current [A] ⁽²⁾	15		28.2		60									8.8-10.2	17.7-20.4										
208-240 VAC / 3 / 50-60Hz	Steam output [kg/h]	4.5-5.2	7.2-8.3	13.5-15.6		23.1-26.6	28.0-32.3	28.8-33.3	38.4-44.3		57.6-66.5	76.9-88.7		2.5-3.3	4.9-6.5		12.2-16.6									
	Steam output [lbs/h]	9.9-11.5	15.8-18.3	29.7-34.3		50.8-58.5	61.6-71.1	63.4-73.3	84.5-97.5		126.7-146.3	169.2-195.1		5.5-7.3	10.8-14.3		26.8-36.5									
	Rated power [kW]	3.4-3.9	5.4-6.2	10.2-11.7		17.3-20.0	21.0-24.2	21.6-24.9	28.8-33.3		2x21.6-24.9	2x28.8-33.3		1.8-2.4	3.7-4.9		9.3-12.4									
	Rated current [A] ⁽²⁾	9.4	15.0	28.2		48.0	58.2	60.0	80.0		2x60.0	2x80.0		8.8-10.2	17.7-20.4		25.9-29.9									
440-480 VAC / 3 / 50-60Hz	Steam output [kg/h]	4.8-5.2	9.6-10.4	14.3-15.6	19.1-20.8	23.9-26.1	28.7-31.3	38.3-41.8	47.9-52.2	62.2-67.8	76.5-83.3	95.7-104.0	124.0-135.0		5.5-6.5	8.2-9.8	13.9-16.6	23.1-27.4	27.8-33.1	37.0-44.0	43.7-52.0	55.6-66.2	73.9-88.0	87.4-104.0		
	Steam output [lbs/h]	10.6-11.4	21.2-22.9	31.5-34.3	42.0-45.8	52.6-57.4	63.1-68.9	84.3-92.0	105.4-114.8	136.8-149.2	168.3-183.7	210.5-228.8	272.8-297.0		12.1-14.3	18.1-21.6	30.6-36.5	50.8-60.3	61.2-72.8	81.4-96.8	96.1-114.4	122.4-145.6	162.6-193.6	192.3-228.8		
	Rated power [kW]	3.6-3.9	7.2-7.8	10.7-11.7	14.3-15.6	17.9-19.5	21.5-23.4	28.7-31.3	35.9-39.2	46.6-50.9	2x28.7 x 31.3	2x35.9-39.2	2x46.6-50.8		4.1-4.9	6.2-7.3	10.4-12.4	17.3-20.6	20.9-24.8	27.7-33.0	32.8-39.0	2x20.9-24.8	2x27.7-33.0	2x32.8-39.0		
	Rated current [A] ⁽²⁾	4.7	9.4	14.1	18.8	23.5	28.2	37.7	47.1	61.2	2x37.7	2x47.1	2x61.2		9.4-10.2	14.0-15.3	13.7-14.9	22.7-24.8	27.4-29.9	36.4-39.7	43.0-46.9	2x27.4-29.9	2x36.4-39.7	2x43.0-46.9		
575-600 VAC / 3 / 50-60Hz	Steam output [kg/h]	4.9-5.1	9.8-10.3	14.6-15.0	19.5-20.4	24.4-25.5	29.3-30.6	39.2-40.9	48.9-51.0	63.6-66.4	78.3-81.8	95.9-100.0	127.0-132.0		4.6-5.0	6.8-7.4	11.5-12.6	19.1-20.8	23.1-25.1	30.7-33.4	38.3-41.7	46.2-50.2	61.3-66.8	76.5-83.3		
	Steam output [lbs/h]	10.8-11.2	21.6-22.5	32.1-33.0	42.9-44.9	53.7-56.1	64.5-67.3	86.2-90.0	107.6-112.2	139.9-146.1	172.3-180.0	211.0-220.0	279.4-292.6		10.1-11.0	15.0-16.3	25.3-27.7	42.0-45.8	50.8-55.2	67.5-73.5	84.3-91.7	101.6-110.4	134.9-147.0	174.2-189.6		
	Rated power [kW]	3.7-3.8	7.4-7.7	11.0-11.4	14.7-15.3	18.3-19.1	22.0-23.0	29.4-30.7	36.7-38.2	47.7-49.8	2x29.4-31.7	2x36.0-37.5	2x47.7-49.8		3.4-3.7	5.1-5.6	8.7-9.4	14.3-15.6	17.3-18.8	23.0-25.0	28.7-31.2	2x17.3-18.8	2x23.0-25.0	2x28.7-31.2		
	Rated current [A] ⁽²⁾	3.7	7.4	11.0	14.7	18.4	22.1	29.5	36.8	47.9	2x29.5	2x36.1	2x47.9		5.9-6.2	8.9-9.3	8.7-9.1	14.4-15.0	17.4-18.1	23.1-24.1	29.7-30.1	2x17.4-18.1	2x23.1-24.1	2x29.7-31.0		
Number of cylinders	1											2			1										2	
Control type	FlexLine mainboard with capacitive 3.5" touch color display														FlexLine mainboard with capacitive 3.5" touch color display											
Internal control voltage	208-240V / 50-60Hz														208-240V / 50-60Hz											
Steam hose connection [mm]	1 x DN 40 ID						1 x DN 40 ID ⁽⁴⁾	2 x DN 40 ID	2 x DN 40 ID ⁽⁴⁾	4 x DN 40 ID				1 x DN 40 ID					1 x DN 40 ID ⁽⁴⁾	2 x DN 40 ID	2 x DN 40 ID ⁽⁴⁾	4 x DN 40 ID				
Steam hose connection [in]	1 x 1.6 ID						1 x 1.6 ID ⁽⁴⁾	2 x 1.6 ID	2 x 1.6 ID ⁽⁴⁾	4 x 1.6 ID				1 x 1.6 ID					1 x 1.6 ID ⁽⁴⁾	2 x 1.6 ID	2 x 1.6 ID ⁽⁴⁾	4 x 1.6 ID				
Dimensions ⁽³⁾																										
Height [mm/in]	535/21.1		695/27.4				750/29.5			785/30.9		750/29.5			785/30.9		535/21.1		695/27.4		785/30.9			785/30.9		
Width [mm/in]	460/18.1		540/21.3				580/22.8			640/25.2		1130/44.5			1170/46.1		460/18.1		540/21.3		640/25.2			1170/46.1		
Depth [mm/in]	320/12.6		320/12.6				355/14.0			420/16.5		420/16.5			420/16.5		320/12.6		320/12.6		420/16.5			420/16.5		
Water installation	Tap water of varying qualities 1 to 10 bar / 14.5 - 145 PSI, with 3/4" external thread														Deminerlized water / cleaned condensate / partially softened water / tap water of varying qualities, 1 to 10 bar / 14.5 to 145 PSI, with 3/4" external thread											

We reserve the right to make technical changes.

⁽¹⁾ Other voltages upon request.

⁽²⁾ FlexLine electrodes: 1.1-fold power consumption after full blowdown. Observe actuation characteristics of automatic circuit-breakers. If necessary, select the next higher circuit-breaker level.

⁽³⁾ External width and depth dimensions. Height including drainage nozzles.

⁽⁴⁾ Incl. Y-piece DN 40.



Our service for 100% customer satisfaction

- Simple ordering process and short delivery times
- Long availability of replacement parts
- Technical hotline +49 4193 895-293 or hotline@hygromatik.com
- HygroMatik distributes in more than 45 countries
- Operating manuals, planning data and information on workshop events available online at hygromatik.com
- Visit our digital spa showroom at spa-showroom.hygromatik.com

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