

# Installation and Operating Instruction

## Lang's "Automatic water-refill" for Vaporizer-systems



Automatic water-refill for retrofitting on *Lang's* Vaporizer-systems

„VAPO-therm“ Steam--Saunaheater: Type V50 / V503 / VG50 / VG503 / VG70 / VG90 / V68 / V89  
 „VaPor-i“ Wall-steamer: Type W10 / Typ W20  
 „THERMOS-vapo“ Type TM48-V

With *Lang's* „Automatic water-refill“ you have the possibility of a permanent supply of fresh water into your sauna vaporizer-system.  
 An annoying manual refill of the vaporizer tank is eliminated.  
 The „Automatic water-refill“ can be connected to the Steam-Saunaheater for retrofitting and filling the vaporizer tank from the water supply network.  
 When ordered and delivered with a *Lang's* vaporizer-system, it is already factory-assembled.



**Important note:**  
 The regulation of DIN EN 1717 „Protection against pollution of potable water installations“ must be observed!  
 Inform yourself about this at your provider or in the sanitary trade.

### Operation:

- Communicating tank system
- The swim-body in the external refill-box regulates the level of the water and opens the inlet-valve even if the level drops slightly.

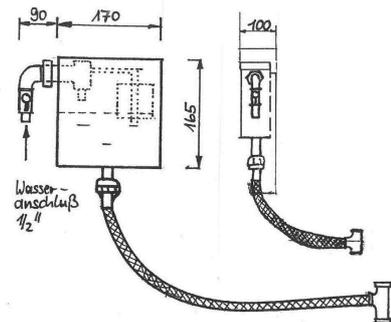
→ **Continuous vaporizer operation**

### Installation:

- Use commercially available Teflon sealing tape to seal all screw connections.
- In the case of retrofitting „Automatic Water-refill“ on *Lang's* Vaporizer-systems, it is first necessary to dismantle the piping on the vaporizer!
- The drain tap on the vaporizer including the pipe section up to the 90° elbow is to be dismantled. The 90° elbow should be turned to on side of the Saunaheater.
- Then mount the T-piece (8) to the 90° pipe-elbow with a Pipe-double-nipple (9) on a side outlet.
- Line up the middle T-piece outlet to the front of the heater, here the drain tap, including the pipe piece, has to be installed again. It may be necessary to reorient and fix the fixing plate of the drain tap.
- On the other side outlet of the T-piece must be installed the Reduce-double-nipple (7).
- Screw one end of the Metal-flex-hose (5) with gasket onto the Reduce-double-nipple (7).
- Mount the support bracket (2) with 3 screws (3) on the side or back of the Saunaheater to install the Refill-box (1). Make sure that the Refill-box and also the water supply to the Refill-box is not exposed to excessive heat radiation. When installing, pay attention to the length of the Metal-flex-hose.
- Fix the complete Refill-box (1) to the support bracket (2) with 2 screws (3).
- Mount the Cutting-pipe-fitting (4) on the pipe socket of the Refill-box (1) and fix one end of the Metal-flex-hose (5) with gasket (6) on the Cutting-pipe-fitting.
- Now connect the Refill-box at the inlet valve with service shut-off tap and connection nipple 1/2" (10) to a supply line to the water supply network.

### Technical Data:

Dimensions: ca. 170/260 x 100 x 170 mm (WxDxH)  
 Metal-flex-hose: 500mm – 1/2" connection  
 Refill-box: Stainless steel  
 Capacity: circa 1,0 Litre  
 Connection: 1/2"  
 Pressure: maximum 10 bar – If it is higher pressure there must be installed a pressure-reducer.



### Components:

- 1 = External Refill-box with mech. float-valve and casing in Chromium-steel
- 2 = Support bracket
- 3 = Mounting screws
- 4 = Cutting-pipe-fitting with 1/2" connection
- 5 = Metal-flex-hose 500 mm – 1/2" connection
- 6 = Gaskets for Metal-flex-hose
- 7 = Reduce-double-nipple 3/8"-1/2"
- 8 = T-piece (Stainless steel) 3/8"
- 9 = Pipe-double-nipple 3/8"
- 10 = Service shut-off tap with 1/2" connection nipple

Note: All screw-connections must be sealed with Teflon sealing tape!



### Important Notes:

- Make electrical connection of the Saunaheater according to the corresponding installation instructions.
  - A stop-valve (1/2") must be installed local on-site in the water pipe to the device and the connection to the refill-box (1/2") must be made by means of a pressure hose.
  - The external refill-box must be mounted, due to the communicating tank systems (Steam-/refill-box) with the upper edge, maximum at the same height as the Steam-box.  
By rotating the swim-body in the refill-box, the water level can be additionally regulated.
  - The supplied medium/water to the refill-box must not exceed a temperature of 50°C.  
It is particularly important to ensure that the water supply to the refill-box (valve) and the refill-box itself, no increased heat radiation (eg. by the heater) is exposed.
  - The vaporizer tank should be emptied and rinsed out after the end of bathing operation!
- Before commissioning the Saunaheater/Vaporizer, the water connection to the external refill-box must be established in advance!
- The heating element of the vaporizer must be covered with water!  
→ **Do no dry operation!**
- The on-site stop-valve must always be closed after completion of the bathing operation!

### Cleaning and Descaling of the vaporizer tank:

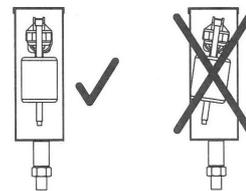
- Depending on the lime content and hardness of the water, the vaporizer tank must be cleaned or decalcified.
- Consult your water company for the degree of hardness of your water.  
In the hardness range I, the device usually works trouble-free and only needs to be descaled if necessary.  
If your water is in the hardness ranges II – IV, the vaporizer tank must be descaled from time to time.
- However, to prevent a strong lime approach in the tank and on the heating element, we generally recommend a decalcification after 5 to 6 times use. For commercial use **at least once a week!**  
This procedure also causes a much higher durability of the heating element.
- For cleaning, add decalcifier for household appliances or simple vinegar essence according to the manufacturer's instructions to the water in the vaporizer tank.  
Let the water descaler mixture or the vinegar essence boil for about 10 minutes and cooling.  
Then drain the mixture and **rinse several times with clear water.**  
Please observe the information of the respective descaler manufacturer.
- **Attention!** Do not use a descaling agent based on sulfamic acid, otherwise the warranty will be voided.

### Cleaning of the external Refill-box:

- The external Refill-box is mounted on the vaporizer side on the sauna heater outside.  
By cleaning the vaporizer tank, the refill-box will automatically cleaned due the communicating container.  
A separate control and cleaning of the refill-box is recommended from time to time.

### Reasons for disturbance at refill:

- In case of reduced or disturbed refilling
  - check and clean the filter-sieve-inset in the connection-dock of the float valve.
  - take care that the swim-body (PE) of the valve is free moveable. (No sanding or touching of the swim-body on the inside of the tank.)
  - may be calcifications in the pipe or hose lines.  
They are to be removed, pierced (eg. with a wire) and cleaned, or the hose lines renewed.



**In the event of deviation or disregard of our installation and operating instructions and any damage attributable to it, any liability is excluded and our guarantee obligation expires.  
Please always observe the operating and installation instructions of the sauna control unit manufacturer.**