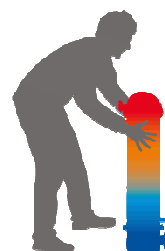


# INSTRUCTION MANUAL

## Ceramic heat exchanger **OVBC**

Next level  
**OF THE EVOLUTION**



## I. Specification

Heat exchanger OVBC is specially designed for heating swimming pools and whirlpools with salt water (water treatment electrolysis of salt water), the heating part (tube) is supposed to use the treated heating water.

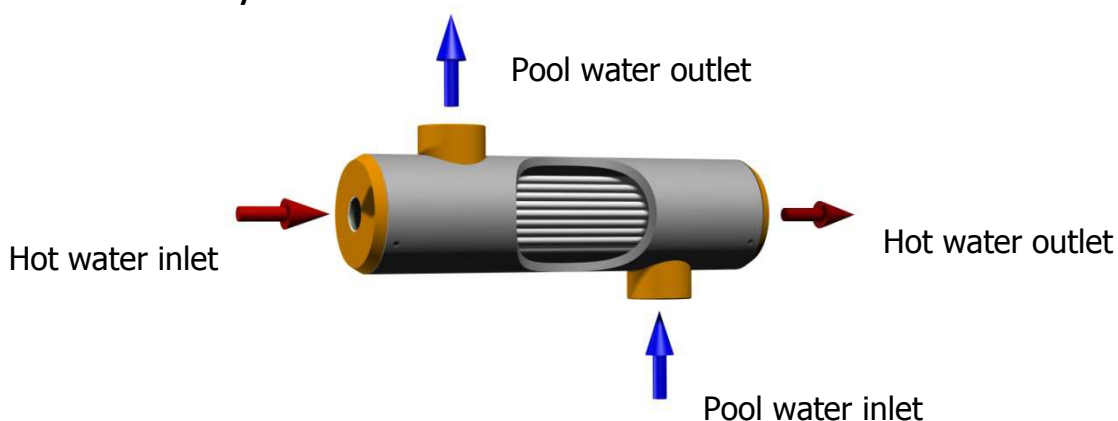
Heat exchangers are approved with following parameters:


Side	Max. working pressure	Max. working temperature
Tubes	3 bar	80 °C
Shell (pool water)	3 bar	40 °C

Note: Keep in mind that continuous operation at maximum pressures and temperatures shorten life of the heat exchanger due to the characteristics of materials, especially plastic shell.

- Heat exchanger must be protected against the increase in pressure and temperature above the max. working parameters.
- The system should be designed to prevent the heat exchanger from encountering pressure shocks.
- Install impurity separation equipment in front of the both sides of the heat exchanger.
- Keep the pool water in the prescribed limits. Follow the national laws, requirements and regulations.

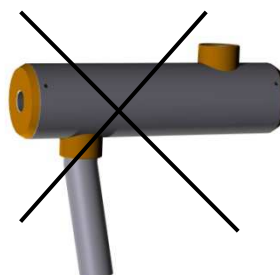
## II. Assembly



 **Handle the heat exchanger carefully, it is sensitive to impact. Protect the inside of the heat exchanger against the intrusion of objects and dirt after cover removing! Protect the surface from scratches.**



 **Install the heat exchanger in a manner where it will not be exposed to mechanical stresses or moments.**



Right – pipe connected in the axis of the connection    Wrong – uptight pipe overloads the connection!

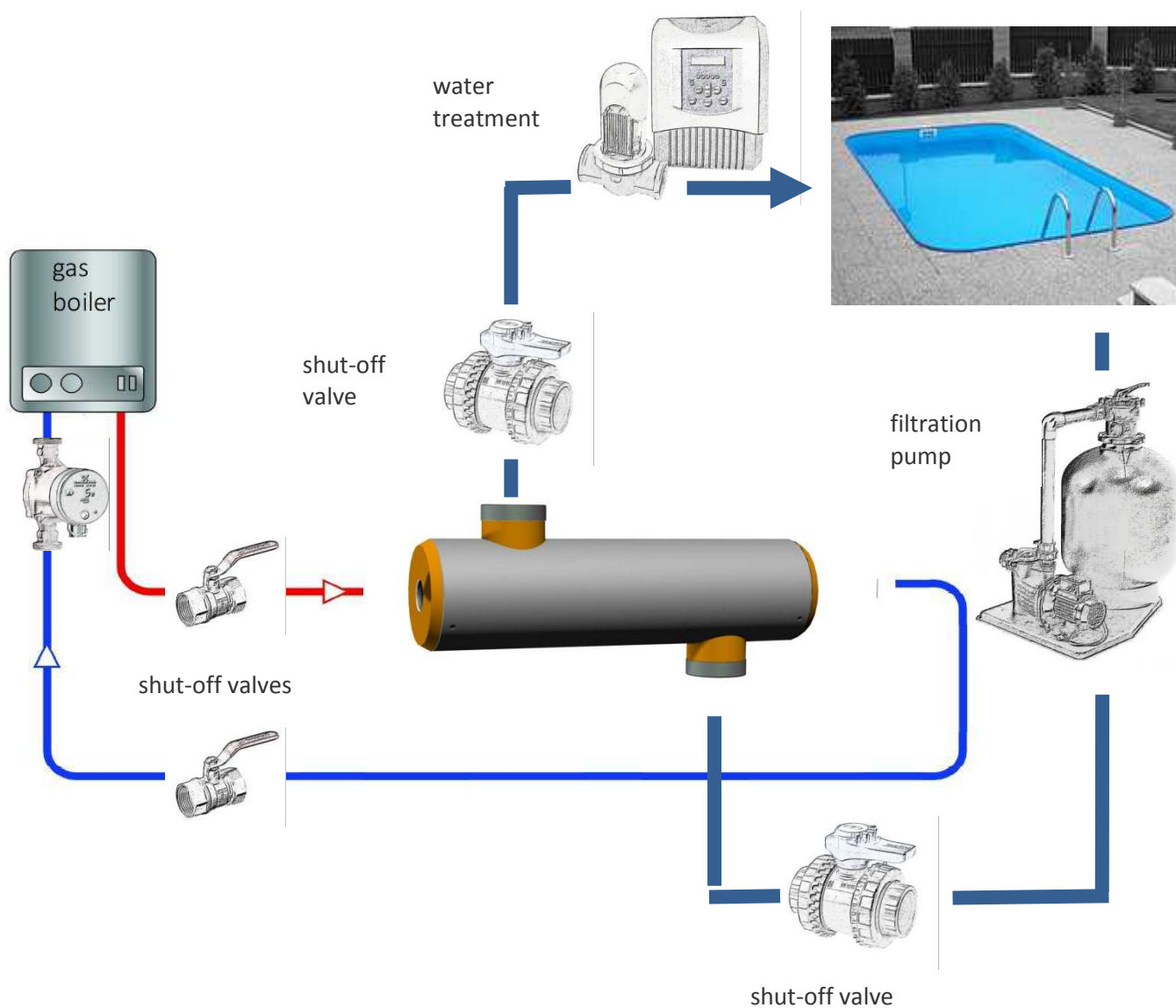
Note: Also the load (forces and moments) of the connected pipes on the hot side must be the minimum. In case you can not completely exclude the forces and moments from the pipe, it is preferred the pipes "push the heat exchanger." Life of the heat exchanger may be shorten in case the pipe "stretches" the heat exchanger.

Pay attention to shaping pipes due to thermal elongation and the use of fittings to connect the heat exchanger. The heat exchanger is ready to connect using union fittings DN 50 with o-ring on the pool side.



There is permitted mounting in horizontal and possibly vertical position. There are two clips attached to the heat exchanger for the wall mounting. It is recommended the heat exchanger gently slide into the clips. "Click" into brackets mounted on the wall requires care and a well fixed clamps to the base. The clip can be very tough especially at low temperatures.

Connection example:



**Start-up:**

- Fill the heating side with water, but not hot from the boiler, vent the air out
- Fill the pool side, vent the air out
- Set the pressures to the working parameters
- Switch on the pool pump
- Slowly open the valve on the heating side or switch on the boiler



Valves must be opened slowly. The pressure change must not exceed 2 bar / min. Avoid air in the piping. It is the source of significant pressure shocks. These are risks for the proper function of your heat exchanger.

It is necessary to eliminate pressure shocks in the device, which can appear especially during rough start-up. This can reduce the life of the heat exchanger or worse, cause an accident.

Protect your heat exchanger from UV rays

**III. Maintenance**

Periodic check of the heat exchanger is recommended.



Protect your heat exchanger from freezing.

Significant power reduction during operation of the exchanger is caused by fouling. Try to clean it by higher flow in opposite direction (compared with working direction). If it does not help, send your heat exchanger to the manufacturer's service.



Do not try to open the heat exchanger yourself! There is high risk of damaging gaskets and inner core.

**IV. Storage/transportation**

Heat exchangers are packed in carton boxes with inner inserts. Protect the packaging against impact, moisture and dirt during transport and storage. It must be stored in a shaded place, which secures it from the weather. Packaging can go back to the supplier.

**V. Warranty**

Seller respectively manufacturer is responsible for the quality, completeness, functionality, and design of the final product. The warranty period for the product is 24 months from the date of sale. If the product fails within the warranty period subjected to the warranty conditions, the manufacturer will repair it or replace it.

Manufacturer will not be responsible for any products that operate out of the conditions and parameters given to manufacturer at the time of purchase, or any product which has been installed incorrectly. Warranty does not cover damage caused during transport and handling. Fouling (impurity) removing from the heat exchanger is not considered a warranty repair. The buyer can claim the warranty in the nearest authorized service center or dealer where the product was bought or in manufacturer's place.

See also „warranty conditions“.

