

Gas-free system water via pressure step degassing

Every system, regardless of how well it has been vented, contains different gases that compromise the quality of the water in the system. These gases enter the system in the make-up water, for instance, or are drawn in through gas-permeable sections of the system and can cause a variety of problems.

PROBLEMS

Gases, whether as free bubbles or dissolved in the water, cause "air problems" that can result in system damage.

- Blocked pipes, control valves and pumps
 - Corrosion, deposits, erosion
 - Disturbing noises
 - Disrupted circulation, reduced heating capacity, etc.
- These often lead to high maintenance and repair costs.

GAS IN WATER

In a heating system, as in a bottle of mineral water, water can be present in three forms.

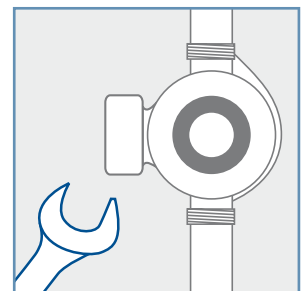
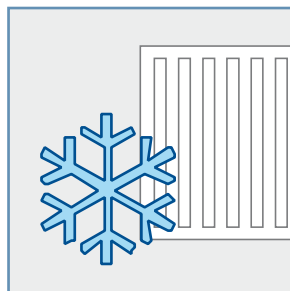
- **Air pockets** can be found as so-called "air cushions" in pipe bends, such as those in under-floor heating systems.
- **Bubbles** are free gases that are entrained in the flowing water and become distributed throughout the entire system.
- **Dissolved gases** are gases that dissolve in the water as a result of the pressure and temperature.

COMPLETE SEPARATION

The possible uses of automatic air vents are limited to filling and emptying the system. Such units are not intended to remove gases from system water. Microbubble separators can remove bubbles during operation, but fall short when it comes to gas dissolved in the water. Dissolved gases are released only after heating to an elevated temperature or in response to a pressure drop. By using a pressure step degasser, it is possible to remove gases from water completely.



THIS IS WHAT YOU WILL AVOID



vacu split

PNEUMATEX®

fill safe

Complete degassing!



Vacuum degassing

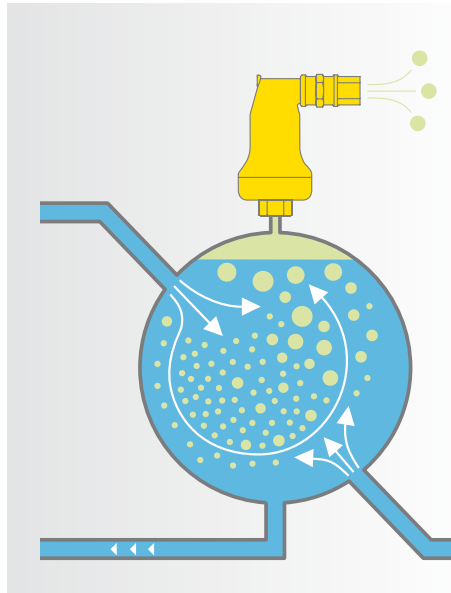
Time-saving and cost-effective degassing

Pressure drop degassers have been used successfully for many years for the central degassing in building services. In this way, systems with large volumes of water or many residential units can be fully degassed efficiently and cost effectively.

COST-SAVING ENVIRONMENTALLY FRIENDLY OPERATION

Pneumatex degassers operate in a cost-saving and environmentally friendly manner.

- After a period of intense continuous degassing, the **eco-interval** operating mode keeps the gas content at a low level by running the degasser briefly several times per day.
- In the optimised, gas-level-dependent **eco-automatic** operating mode, a sensor measures the amount of gas discharged and in this way controls how long the unit runs.



MODE OF OPERATION:

Gas-containing water is diverted from the main flow into a separate pressure vessel connected in a bypass. This is where a vacuum is generated. The gases are released from the water and are agitated further by injecting additional water through a separate nozzle, which greatly increases the degassing action. The gases are then discharged and the gas-free water returned to the system.

Pressure step degassing is independent of system parameters and thus universally applicable.

The solution: vento

Complete vacuum degassing from Pneumatex

ADVANTAGES:

- Complete system degassing via a single unit
- Easy incorporation into the system
- Negligible operating costs
- Protects the system against high maintenance and repair costs
- Longer service life for your equipment



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