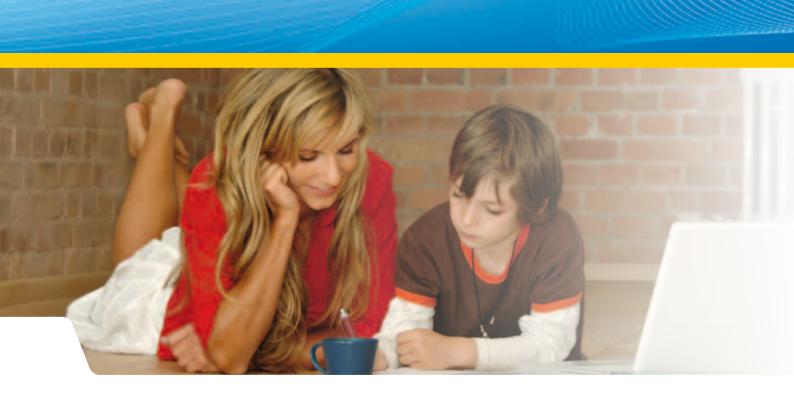
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OPTIMUM PERFORMANCE IN DOMESTIC HEATING AND COOLING SYSTEMS

CUT COLUMN





An efficient system means a higher level of comfort

All types of houses and apartment buildings have one major thing in common. They all have systems for heating and/or cooling the interior.



Comfort as a basic consideration

Comfort is important to occupants and heating, cooling and hot water systems play an important role in this regard. However, despite periodic inspections and maintenance, there are many occasions where these systems have not always provided optimum performance. Many owners, landlords or installers receive





complaints from occupants regarding the temperature inside buildings. This can be prevented by using high quality components and making sure that installation is carried out by skilled professionals. It is just as important to fill the system with clean system water and to maintain the quality of this water. It therefore cuts both ways. Occupants are satisfied and so are maintenance people.

Total solutions

Spirotech offers an extensive range of total solutions for domestic systems: accessories, additives and advice to ensure optimum efficiency and guarantee the quality of the system fluid. These products and services reduce faults, wear and maintenance as well as improve system performance and lower energy consumption. And what is more, these total solutions provide major benefits and save time during the design, installation, start-up and commissioning of systems.

"Fewer complaints, less wear, better performance."

"The number of complaints in the residential area is down 70%. There are also far fewer problems and repairs. In short: maximum comfort for occupants."



Real-life examples



Far fewer complaints and far fewer pump and expansion tank breakdowns.



The results of the test were quite clear: no follow-up visits needed to be made to the systems fitted with a SpiroCombi.



SpiroVent and SpiroTrap fitted as standard in every heating system.

occupants and users and consequently fewer complaints. The products also protect the system so that it will have a longer life.

The use of Spirotech products ensures a higher level of comfort for

Number of complaints in residential area down 70%

Half of the 1000 properties in a complex were fitted with a SpiroVent deaerator. A good four years later, the number of problems, repairs and service visits was consulted and it was noticed that the properties with a SpiroVent deaerator appeared on the list far less often. The number of complaints and problems relating to the properties with a SpiroVent was almost 70% lower. In addition, 80% fewer expansion tanks had had to be replaced while 60% fewer pumps had been replaced.

SpiroCombi fitted as standard by housing corporation

While renovating 160 heating systems, a housing corporation decided to fit 50% of the properties with a SpiroCombi deaerator and dirt separator. Circulation problems arose in 24% of the houses without a SpiroCombi. These problems did not occur in the houses with a SpiroCombi; these convincing figures helped the decision for the housing corporation to fit all the boilers for both new and renovation projects with a SpiroCombi. According to the housing corporation, this product provides real value for money, not only in the short term but also in the long term by protecting the systems.

SpiroVent and SpiroTrap prevent "discomfort and misery"

A large housing corporation is in no doubt about the benefits SpiroVent deaerators and SpiroTrap dirt separators have to offer. While renovating seven large residential buildings, these products were fitted as standard in every heating system. The reason: "Air and dirt very quickly lead to comfort-related problems and have a negative effect on the life of a system. Deaerators and dirt separators are competitively priced and prevent a lot of discomfort and misery."





Solutions for the domestic sector

Optimum system water quality is achieved when air and dirt is kept to a minimum. If air and dirt is not removed, or is not removed sufficiently, numerous complaints and problems can arise, such as annoying noises, frequent manual venting, deteriorating pump performance, an imbalance in the system, unnecessary disturbance and excessive wear. All these things result in higher energy consumption and complaints from occupants and often require immediate action.

Spirotech offers an extensive range of solutions for conditioning and keeping water from climate conditioning systems in an optimum condition. All products can be used for both new installation projects and for renovating heating and cooling systems.

SPIROVENT[®] - micro bubble deaerators

SpiroVent micro bubble deaerators are installed inline and continuously remove free air and micro bubbles from the system fluid. The unique Spirotube separates and removes even the smallest air bubbles. SpiroVent deaerators are available in horizontal and vertical designs, from 22 mm to 2" inclusive, and are suitable for domestic applications.

SPIROVENT[®] Superior - vacuum degassers

With SpiroVent Superior vacuum degassers, part of the system fluid is temporarily put in an underpressure (vacuum) condition. The air dissolved in the fluid is released, separated and removed from the system. A vacuum degasser is available for domestic systems with a volume of up to 15 m³ and a maximum operating pressure of 3.5 bar.





SPIROTRAP® - automatic dirt separators

SpiroTrap dirt separators remove dirt particles from system fluid. Even the smallest particles - from 5 μ m (= 0.005 mm) - are separated and removed. SpiroTrap dirt separators operate continuously and are virtually maintenance-free. SpiroTrap dirt separators are available in horizontal and vertical designs, from 22 mm to 2" inclusive, for domestic applications.

SPIROCOMBI[®] – automatic deaenators and dirt separators SpiroCombi deaenators and dirt separators continuously remove free air, micro bubbles and dirt particles from system water, the optimal solution for cooling systems. Whether or not it is also the best option for heating systems will depend on various factors. Our specialists are able to provide you with the best advice for every specific situation. The deaenators and dirt separators are available in horizontal designs with a 22 mm compression fitting and a 1" female thread and in a vertical design with a 22 mm compression fitting.

SPIROPLUS® - flushing agents and additives

SpiroPlus is a range of flushing agents and additives ideal for maintaining the quality of the system fluid and the system itself. The additives have been specially developed for use in heating and cooling systems and come with a KIWA-ATA certificate.

The SpiroPlus range includes the following additives:

SpiroPlus Cleaner SpiroPlus Sealer SpiroPlus LimeCleaner SpiroPlus AntiFreeze Dirt dissolver (flushing agent) Leak sealer Descaler (flushing agent) Frost protector









Solar applications Spirotech also offers an extensive range of air vents and deaerators for solar applications.



Add-on sets

Spirotech provides complete add-on sets for vertical oil and gas boilers with distributors and mixing groups which are ready for use. These can be installed between the boiler and the mixing group.



Insulation Specially made insulation sets are available for most deaerators and dirt separators.

Separate literature is available which contains detailed product information. You can also find this information on our website.





Better for the system; benefits for everyone

Spirotech products and services not only offer attractive benefits for systems. Everyone involved stands to benefit from what Spirotech has to offer, from advisers, designers, distributors and installers to system users and maintenance people.

For advisers, designers and specifiers

Spirotech tools make the task of designing systems which keep the system water in optimum condition a lot easier. These tools include CAD symbols, product data sheets and standard specification texts. In addition, the specialists at Spirotech are always available to answer specific questions and provide customer-specific advice.

"Spirotech tools make the task of designing systems and producing specifications a lot easier."

For housing corporations

The benefits to be gained by preventing complaints from occupants are twofold. No effort needs to be put in following up complaints and occupants enjoy a higher level of satisfaction. In addition, preventing faults and damage ensures a better return on investment. Homes fitted with Spirotech products have been found to experience far fewer problems and damage than homes without. Naturally, this also has a positive effect on the life of systems, both from a technical and an economic point of view.

"Since we have been using Spirotech products, the number of complaints from residents has gone down considerably."







For installers

Spirotech products offer attractive benefits for installers. They can be installed quickly and easily and are virtually maintenance-free. For example, it takes only a few seconds to flush out the SpiroTrap and this operation can be carried out during routine system maintenance. It has been proven that the use of Spirotech products results in fewer complaints and fewer faults.

"There is nothing wrong with hard work but luckily Spirotech renders a lot of the tedious jobs superfluous."



For wholesalers and intermediaries

Spirotech has an extensive range of products covering all standard dimensions which are available from stock. Spirotech also provides its wholesalers and resellers with advice and materials.

"As wholesale traders, we have to be able to supply our customers quickly. Spirotech understands that and makes sure that we are able to do it."



Digital support Product data sheets, standard specification texts, line drawings, CAD symbols, project descriptions, etc. are available via our website.

Custom-made solutions and OEM applications

Spirotech offers not only standard products. If necessary, we work with customers to produce custom-made solutions. These are based on users' specific requirements. If desired, these can also be supplied as OEM products.







Spirotech: accessories, additives and advice

Spirotech designs and produces innovative total solutions for conditioning fluids in HVAC and process systems. Our products and services reduce faults and wear, less maintenance is required, performance is improved and energy consumption is reduced.

Spirotech is deservedly regarded as the only real specialist in the world. Leading manufacturers of system components recommend Spirotech products on account of their high standard of quality and the company's vision on product development and process improvement.

Thanks to a very extensive international network of suppliers, users all over the world enjoy the benefits of our products and services every day.

Spirotech is a Spiro Enterprises company.



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