

The Rotex Tank is the Heart of the Sun Equinox Heating Systems

The Sanicube storage heat exchange technology is featuring a composite hot water storage cylinder with a stainless steel corrugated pipe heat exchanger. It is a combination of hot water storage tank and flow water heater system with properties which are particularly water hygienic. The Sanicube modules can be coupled to suit any hot water or heating demand from the largest commercial or industrial application to the individual domestic residence.

The ROTEX Sanicube is a combination of hot water storage tank and a water heater system. The actual heat is not stored in the domestic water but in the clearly separate storage water. The domestic water content is relatively low, depending on the model configuration. The total storage tank capacity is 79 gallons or 132 gallons, however, the heat volume which can be stored and extracted is correspondingly large. Heat storage tank and flow heater = Storage Heat Exchange = SHE. The storage tank water is filled once during commissioning and is only used for heat storage. It is neither replaced nor consumed. The storage tank itself consists entirely of plastic, the inner and outer wall is made of impact resistant polypropylene (PP), the space in between is insulated with heat-conserving foam. This produces excellent heat insulation values and keeps surface losses to a minimum. The heating of the storage tank water and the charging of the storage. The issue of water hygiene is of particular relevance in the case of buildings with a large hot water demand. In hotels, hospitals, sports halls and homes for the elderly, the supply of hot water is extremely important.

The ROTEX Sanicube hot water storage tank optimally meets the most demanding water hygiene requirements, since it operates like a flow water heater with regard to domestic water. Where there is a demand for large volumes of hot water, several ROTEX Sanicubes are simply connected to each other like modules. This has the advantage that the available space can be used in various ways. Thanks to its light weight and its favorable dimensions, the Sanicube hot water storage tank is easy to transport and can be easily incorporated into existing buildings.

The ROTEX Sanicube enables a very wide range of system variants. It is possible to meet the most complex demands with the different heat exchanger designs in the ROTEX Sanicube range. As a result, several heat sources can be integrated to produce additional heat extraction for a swimming pool or similar. In these cases, the whole systems usually remain relatively simple and clearly arranged and the control technology costs are generally low. In the event of a subsequent change in the performance requirements, the system can often be modified very easily and flexibly without having to increase or decrease the number of Sanicubes owing to the modular layout

The calorifier is filled with water only when put into operation (no additives). This water serves as the storage medium and is not replaced at any time of the unpressurised operation. In the stored water compartment it is only possible for limescale to be deposited in the initial phase of use. As a result, all the heat exchanger pipes in the stored water remain clean.

The calculation of the required number of Sanicube storage tanks and the corresponding total heating output depends on the required maximum withdrawal quantity (withdrawal per unit of time) and on the withdrawal profile based on the dimensioning. Inside large widely dispersed buildings, it can also often be worthwhile to distribute several Sanicube storage tanks decentralized outside the building and to install them as close as possible to the consumers, thereby minimizing heat losses and saving on pumps and expensive pipelines.

Hotels or hospitals often require large volumes of hot water instantly. The volume of heat stored in the ROTEX Sanicube is so large that a momentary increase in demand can be covered, even if the recharging output of the heat generator is comparatively small.

Short-term hot water output for each Sanicube unit therefore does not depend on the output of the heat generator to any great extent. If several Sanicube storage tanks are connected to each other in a large system, the outputs of the individual storage tanks are added to each other.