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The ten-point fitness programme for buildings.

Reducing emissions, increasing climate comfort and cutting energy costs.

There are plenty of reasons for improving energy efficiency in buildings – in terms of both economics and ecology. Thanks to the SAUTER ECO¹⁰ modular fitness programme, energy costs can be cut by up to 30% and user comfort can be improved at the same time.



Building technology has now reached a standard that permits high levels of energy efficiency, but optimisation is possible only when information can be called up and visualised at a central point, with the help of networked building and room automation. The recorded values show where energy is 'falling by the wayside' and consumption can be improved. The goal of the SAUTER ECO¹⁰ energy-efficiency programme is to set the right course so that operating costs can be cut throughout a building's lifetime, thereby safeguarding investments.

1

We continuously deploy ultra-modern technologies to centralise and visualise energy-relevant information.

Consumption figures on their own merely reflect the total energy used in a building. But it is important for the owner and operator to know how much energy is consumed in relation to the useful area, or per unit of time. This information can also be obtained in detail for individual parts of the building or items of equipment. SAUTER building automation can determine key energy figures from the data pool, and it can visualise energy consumption with presentations based on time intervals or comparisons with previous periods.

2

We carry out a critical comparison of your consumption with relevant internal and external benchmarks.

The tasks of modern building management include ongoing optimisation of energy costs. For example, to enable comparisons of energy consumption with previous years or the same months in previous years, the building automation system first visualises the consumption data in the form of key figures. However, it is possible to verify whether the building technology is operating cost-effectively only when these figures are compared with relevant energy benchmarks for the type of building in question.

3

We compile a customised energy concept, taking account of the total costs throughout the building's life cycle.

To an increasing extent, operating costs for buildings are becoming a key criterion. Comparative tools, such as the energy certificate, classify the building according to its energy expenditure, thereby influencing the value of the real estate. So, at an early stage of planning, decisions already have to be taken as to which types of energy production, distribution and usage are cost-effective. Thanks to its many years of experience, SAUTER supports its energy advisers when it comes to planning the building technology. Factors that determine the choice of systems include not only the computed requirement, but also the structural design of the building, the usage of the property and the time requirements for the provision of heating, cooling, air and light.

4

We shall show you the possibilities for using renewable energies, from the ecological and economic perspectives.

Renewable energies can meet a large proportion of the total energy requirement. The aim here is to combine renewable energies with building technology in an intelligent and efficient manner – for example, by combining geothermal heat or solar energy with conventional types of heating and cooling technology, or by coupling power and energy with parallel power generation; the goals are always to optimise the utilisation of the primary energy and to make efficient use of renewable energies.

5

We drastically cut emissions, ensuring that you can make a sustainable contribution towards protecting our living environments.

As well as evaluating consumption values, energy analysis tools also calculate the emission figures for your building. These provide visible proof not only of energy saved, but

also of the effects of energy optimisation measures on climate protection. Another aspect is that our products are manufactured according to the latest findings, using materials that protect the environment. In this way too, our customers play an important part in minimising CO₂ emissions.

6

We have confidence in our pioneering eu.bac-certified products and solutions.

The eu.bac (European Building Automation Controls Association) programme was set up to certify products in the building automation sector on the basis of international standards. This makes it easier for building technology users to select suitable products. For example, SAUTER's ecos intelligent unitary controllers have already been certified to the eu.bac standard with excellent results.

7

We network all the systems in the building and rely on our open, flexible and universal room and building automation.

To ensure an unrestricted flow of information across all the building's systems in order to analyse energy, SAUTER not only backs the global BACnet standard but goes one stage further: with BACnet from management level through to room automation, SAUTER redefines the concept of "universality".

8

We co-ordinate the technologies of the building shell, the building automation and the system engineering.

Building automation is directly linked to the actual structure of the building, its users and even the conditions prevailing outside the building: from self-adapting control loops and the inclusion of marginal conditions such as air humidity and quality, through to the provision of heating and cooling energy, controlled according to the weather forecast. For

9

We encourage your users to develop an energy-conscious attitude.

Once energy expenditure is expressed not only in figures but also in relation to the building, with the help of overviews and graphics, there is a change in the way people perceive the responsible use of energy. This approach also makes it possible to see the success of energy optimisation measures – on the visualisation interfaces or the automation systems, or directly on the employee's PC screen. This encourages a responsible attitude to energy resources, and changes people's behaviour.

10

We assure you that your operating costs will be cut.

From the very first day of usage, you have complete control over your property's energy consumption. And as soon as your modernisation is complete, you will know the total saving on energy costs and CO₂ emissions. Continuous energy monitoring and ongoing optimisation measures will safeguard your investment.