

Focus on efficiency

Hardly a stone was left unturned during the rapid extension of the competence center for liquid analysis in Gerlingen, Germany. Today, modern architecture and a sustained energy concept mark the site.

25 million euros has been invested in extending and rebuilding the competence center for liquid analysis. Progressing in three stages, extra production areas, modern offices, laboratories, training and conference areas went up in Gerlingen, Germany. “As a company operating in the environmental field, we felt we had to get a message across,” explains managing director Dr Manfred Jagiella – with effect that the latest in building services engineering was employed in the new building.

Heating, cooling, power

The centerpiece is a combined heat and power plant which in Gerlingen also doubles as an emergency backup generator, especially for the computer center. The natural gas unit generates 223 kilowatts of electric power beside 335 kilowatts of heating power, which can switch to cooling – a very special feature – when needed: When the experts heard that compact absorption coolers were being developed for precisely this purpose in the course of an R & D project, they opted for a pilot installation and this has substantially increased the efficiency.

Thermo-active building systems

Pipes routed in concrete ceilings and floors cause the building elements to act as heat collectors in winter and as cold collectors in summer, so reducing the energy needed for heating and cooling. Fresh air is routed into the building through ground collectors – six long tubes each 1.40 meters in diameter, integrated into the foundations. Just a few centigrades difference have a tremendous impact – and the energy costs drop in line with the energy need.

The roof is alive

The greening of the large roof surfaces is more than an eye catcher. It improves the climate inside the building and relieves the public sewage system because the plants absorb plenty of rainwater. The roof has become a biotope.

Incentive and obligation

For the energy management of the building, Endress+Hauser Conducta was one of the first companies to be certified under ISO standard 50001. And the German Ministry of Business and Technology honored the site’s consistent energy optimization in 2012 with an award for energy efficiency.



Triple benefit: the combined heat and power plant on the technical service level is a central element of the energy concept.



All under control: careful energy monitoring helps to steadily improve the efficiency at the Gerlingen site.