

NEW Business Premises EasyLife

Schütz, Sonnberg i.M., Austria



TRADE

Office building

EasyLife Schütz built their new corporate head offices as an amalgam of office buildings and manufacturing facilities. This project promises a new kind of solar utilisation. Primarily, solar energy is used for heating domestic hot water (DHW) and central heating backup, just as is feasible with conventional systems. However, with our system, solar energy is discharged in stages. High temperatures are utilised for DHW heating, medium temperatures for central heating backup and low temperatures are fed into the geothermal brine source. This source storage created underneath the building then acts as a source of heat for our heat pump. Thanks to the fact that, on account of the solar charge, the ground has a higher temperature than would normally be the case, the heat pump operates with high efficiency and uses less power, as a result. We estimate that solar will cover approx. 82 - 88 % of the total energy demand. For cooling, the heat pump cycle is simply reversed. The system's demand for electricity is covered by a photovoltaic system. As a result, the building is energy-neutral.



Project data

Property type:	Office building
Year of construction:	2011
Gross floor area (GFA):	1,200 m ²
System:	EMS with geothermal store (brine)
Completion:	2012
Use:	Heating, cooling DHW, Thermoactive Component System TABS, chilled ceilings
Main components:	2 x EMS heat pumps 22 kW, solar thermal system 52 x IS-PRO 2Q, ground source below offices and manufacturing site, EnergyController DN50, TABS inside the factory, chilled ceilings in the office
Specialties:	The equipment room is located behind a display window and can be presented at any time. An additional PV system on the factory roof makes the entire building energy-neutral
Energy savings per year:	124,000 kWh/year
Reduction in CO ₂ emissions per year:	30,000 kg CO ₂ /year
Regenerative portion of energy demand:	100 %