



Solar Process Heat Installation

Feifer metalworking Holic, Czech Republic

Summary description

Feifer is a large company that ranks among the leading European producers of strapping and foil wrapping technology. In the framework of the project that aimed at reducing the energy consumption of the company, thermal insulation of industrial buildings (replacement of fillings and insulating of roofs) and administrative buildings (additionally cladding was also insulated), decentralized heating (abolition of the old boiler house and its replacement by gas condensing boilers directly in the buildings) and installation of solar thermal system on the flat roof of an administrative building that is oriented to the south, were carried out.

The solar system implemented in 2008 is an example of the use of cheaper large-area collectors and of incorporating of the solar thermal system into a broader reconstruction. The company has a number of 110 employees.

Background

Because of expected increase of energy prices and also because of reduction of operating costs (thanks to the financial subsidy) led to the realisation of a solar process heat installation. Solar process heat is used for preparing hot water, for heating of buildings, for preheating water and rinsing in the black bath (surface treatment).

Technical description

- main technical data:
collector area of 82,8 m² (9 pieces of large-area collectors Suntime, each with an area of 9,2 m² aperture), buffer storage of 5 m³
- temperature level, processes:
the black bath has almost 100 °C, up to 50 °C it is preheated with the solar system, then with electricity

- the technical feasibility:
Originally the solar system was intended only for preparing of hot water. Abundance of heat is now used also for preheating water in the black bath and for heating of buildings. Switching between the different components is automatic.
- economic data:
The total costs of all the measures amounted to 14,500,000 CZK (584 489 EUR). The financial subsidy amounted 5,407,000 CZK (217 954 EUR), i.e. 40% of the costs.

Results & conclusions

Financial subsidy from the Operational Programme Enterprise and Innovation of the Ministry of Trade and Industry (ECO - ENERGY): 5,407,000 CZK (217 954 EUR) were most helpful to support the installation.

