

Empiria sees instant benefits from green energy.







Empiria branchin Banská Bystrica

Empiria leads the way

As the largest HVAC solutions provider in Slovakia, Empiria operates ten wholesale outlets as well as the Empiria Express network of self-service shops and eight Lefresh bathroom studios. The company recently built a completely new facility at its Banská Bystrica branch, which features offices, retail space and warehouse, a bathroom studio and showroom.

"Green" technology that cools and heats

Empiria made sustainable development and environmental friendliness a central part of its concept from the very beginning. Because it operates throughout the year, the Empiria facility needs both heating and cooling. To meet these requirements, Empiria chose ground and air source heat pumps from Thermia. Heat pumps use renewable energy from ground water as well from the air. The new system uses Thermia Mega M (11-44 kW) and Therima Atec (16 kW) units in tandem.

Thermia Mega ground source heat pump draws energy from the ground water while the Atec takes its energy from the air, nearing that the two units complement each other perfectly. Both heat pumps can produce heating, hot water and cooling. As necessary, Mega provides passive cooling and Atec active cooling.

The main advantage of the inverter technology in the ground source heat pump is that it can

continuously adjust heating or cooling output to current demand. As a result, the heat pump can supply 100 per cent of the building's energy requirements.

Heating is distributed via a floor heating system and cooling by fan coils. The two heat pumps now provide comfort for around 20 employees and a building space of approximately 4,000 square meters.



Empiria store interiors and showroom



What's more, the room in which the units are housed is spacious enough to serve as a demonstration and training facility for installers.

Energy efficiency and low CO₂ emissions

"On current evidence, our energy consumption during the first winter 2019/2020 was surprisingly low, even though this winter was warmer than usual. However, we are confident that our energy costs will remain at a very low level."

- Jan Matusek, Sales Area Engineer, IVAR CS spol. s r. o.

The new energy solution enables Empiria to provide excellent indoor comfort for both visitors and employees at low operating costs while maintaining a clear focus on environmental protection.



Commissioning date: 2020 Location: Banská Bystrica

Investor: Empiria **Installation contractor:** Termomont Dolná Krupá a.s.

Building characteristics:

- Usable area: 4,000 m²
- Calculated thermal load: 121 kW
- Cooling demand: 44 kW

Solution deployed:

- Thermia Mega M (11-44 kW) ground source heat pump
- 2 x Atec 16 air source heat pump
- Buffer tank 1,000 liters
- Heating and cooling distribution: floor heating and fan coils



Bathroom showroom



Machine room with Thermia Mega

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IVAR CS spol. s r. o. acts as a commercial and technical representative of several European companies in the fields of water, heating, gas, filtration and water treatment, pumping equipment, solar systems and heat pumps, storage tanks, fan coils and air conditioning. Our primary goal is customer satisfaction. Therefore, we provide a wide range of products in sufficient quantities as to be always ready for immediate delivery.

IVAR updated its organizational and technical parameters introduced during the 2000 global quality standards: ISO 9001 and environmental policy with ISO 14001 in 2004. IVAR CS is continuously increasing its sales in the Czech and Slovak markets. One of the principal ways of achieving this is the participation in exhibitions and fairs. Exhibitions allow IVAR to build awareness from the general public and maintain contact with individual customers.

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Engineered with passion

Developing truly sustainable renewable energy solutions can only be achieved with passionate, dedicated, and uncompromising experts. Some of Europe's most highly qualified engineers can be found in our own R&D center.



Born in Sweden

All our products are designed, manufactured, and tested in Sweden using the latest technology and the highest quality components. All components inside our ground source heat pumps are made in Europe by world-leading industry specialists.

