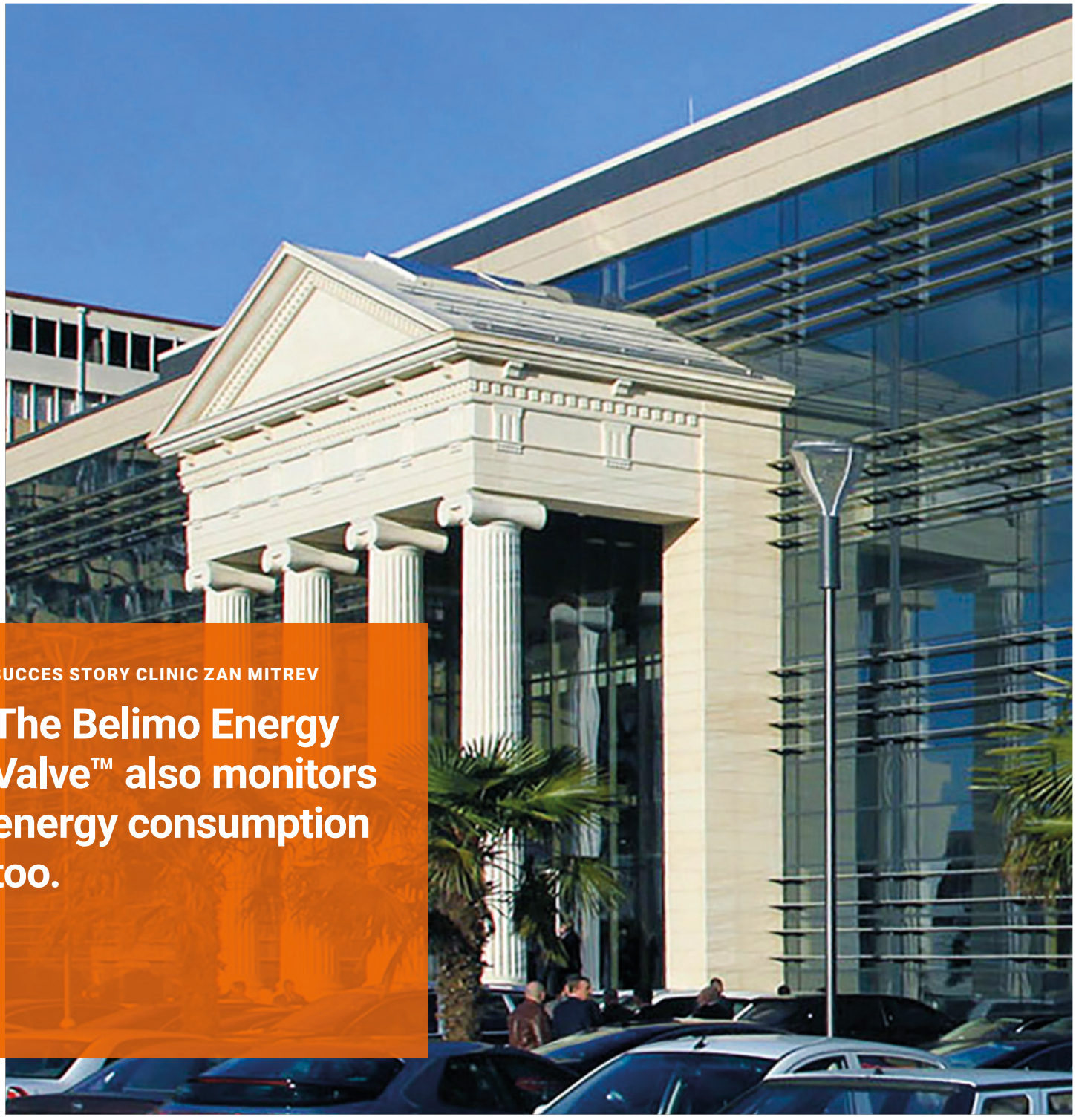

SUCCES STORY CLINIC ZAN MITREV

The Belimo Energy Valve™ also monitors energy consumption too.

The Clinic Zan Mitrev knows where the energy is flowing

It's not just patients with heart conditions that are being monitored in the new clinic Zan Mitrev for cardiology in Skopje, Macedonia. Since its opening on 1 March 2016, it has also been possible to monitor the flow of energy by using the Belimo Energy Valve™. As in cardiac surgery, the entire HVAC system had to meet very high standards in terms of precision, reliability, transparency and safety. The perfect solution lies in the precise and innovative Belimo Energy Valves™.

TYPE OF BUILDING
Hospital

PROJECT
New building

SECTOR
Heating, ventilation and air conditioning (HVAC)

PRODUCTS
Belimo Energy Valve™, 6-way characterised control valve

BELIMO®

Requirements.

Initial situation

In terms of hygiene, reliability and safety, the requirements that the clinic Zan Mitrev had of the HVAC system were very demanding. Covering an area of 18,000 m^2, the hospital accommodates various operating theatres, an intensive care unit, laboratories and other rooms. The new systems therefore had to satisfy a whole host of different room requirements. It's important for the hospital to know how energy is flowing, especially in rooms with high energy requirements, such as the operating theatres or the intensive care unit. However, stringent hygiene and safety standards have to be met too.

Project requirements

- Energy consumption must be apparent, and it must be possible for this to be monitored and controlled individually in every room
- The products used must be reliable and precise

Belimo solution

The only solution that meets all the project requirements is the Belimo Energy Valve™. A total of 36 valves of this type, in diameters of DN 25 to DN 80, were fitted in the HVAC system. With the Belimo Energy Valve™, the hospital has received a unique product, which delivers five functions at the same time: measuring, controlling, balancing, shutting and energy monitoring. The integrated Delta-T manager provides an extra benefit because it reliably ensures compliance with a minimum temperature difference and thereby prevents inefficiently high flow rates. This is incredibly important, especially when cooling with groundwater. Moreover, it took just two hours to set the parameters for all 36 Belimo Energy Valves™. In addition to the Belimo Energy Valves™, 112 6-way valves were connected within the zones, to the local BACnet output. The zone solution comprises a 4-pipe distribution system with active chilled beams and air handling units at its end. These air handling units meet all the necessary hygiene standards. The entire HVAC design is based on water-water heat pumps with a 2.1 megawatt rating. This energy is used in turn for cooling (7°C/12°C) and heating (40°C/45°C).

"The Belimo Energy Valve™ is quite simply perfect."

Dr. Zan Mitrev, investor and owner
Cardiology Hospital Zan Mitrev

Result.

Customer benefit

Belimo Energy Valve™:

- Rapid setting of parameters and commissioning.
  The 36 Belimo Energy Valves™ were parameterised and commissioned in only two hours
- Transparency in terms of energy consumption during cooling and heating

6-way characterised control valve:

- Compact and can be installed in false ceilings without difficulty in order to individually serve any room
- Operating safety through reliable decoupling of cooling and heating circuit
- Simple installation, as it is impossible to mix up the valves

Customer satisfaction

Dr. Zan Mitrev, investor and owner of the cardiology hospital, is impressed by the Belimo Energy Valve™. It has met his high expectations perfectly. In the world of cardiac surgery, everything is precise, exact and transparent. The Belimo Energy Valve™ was therefore tested as if it were an excellent cardiac surgery tool. "The Belimo Energy Valve™ is quite simply perfect," concludes Dr. Mitrev, basing this huge compliment on his very 'precise and flawless' world: "The requirements placed on Belimo's products, especially the Belimo Energy Valve™, are very high because they monitor the temperature difference and thereby perfectly control the flow of energy in operating theatres. Coupled with the 6-way characterised control valve, all our requirements were more than met."

All inclusive.

Belimo is the global market leader in the development, production, and sales of field devices for the energy-efficient control of heating, ventilation and air-conditioning systems. The focus of our core business is on damper actuators, control valves, sensors and meters.

Always focusing on customer value, we deliver more than only products. We offer you the complete product range for the regulation and control of HVAC systems from a single source. At the same time, we rely on tested Swiss quality with a five-year warranty. Our worldwide representatives in over 80 countries guarantee short delivery times and comprehensive support through the entire product life. Belimo does indeed include everything.

The "small" Belimo devices have a big impact on comfort, energy efficiency, safety, installation and maintenance.

In short: Small devices, big impact.

- 5-year warranty
- On site around the globe
- Complete product range
- Tested quality
- Short delivery times
- Comprehensive support

EN – 12.2024 – Subject to technical modifications

BELIMO Automation AG
Brunnenbachstrasse 1, 8340 Hinwil, Switzerland
+41 43 843 61 11, info@belimo.ch, www.belimo.com

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