## uponor

References

# Modernization of Heviz Thermal Lake and Saint Andrew Hospital



#### **Uponor involvement**



15 000 m2

### Modernization of Heviz Thermal Lake and Saint Andrew Hospital

The Thermal lake is located at Heviz, a beloved holiday resort of Hungary, a couple of kilometers from the western area of Lake Balaton. The Spa has international reputation, and is full of tourists summer and winter.

#### **Project Facts:**

Location Completion Heviz, Hungary 2015

Building Type Product systems

Sports facilities Local Heat Distribution

Address Project Type 8380 Hévíz, Dr. Schullhof V. sétány 1. Renovation

#### **Partners**

Installer

Z-Pannon Zrt (Zalaegerszeg)

The development of the area has been started at the of the 18th century, and it has gained its current facade through continuous constructions and renovations. The building complex by the Thermal Lake incorporates the Hospital for Rheumatic Diseases and a hotel. The heating and hot water production is provided by central boiler-houses. The produced energy was conducted to the buildings via steel pipe-lines installed into existing individual trenches. This existing network became worn-out throughout the years and turned outdated. Thus at the end of 2014, the system went through

modernization within a serious energetics investment. This modernization utilized the UPONOR Ecoflex flexible pipe system in a length of 1000 metres.

#### Local heat distribution for any solution

It became clear even in the planning phase that the construction can only be carried out with plastic pipe-lines, because of the crossing of numerous existing utility conduits. The UPONOR Ecoflex can be installed with an exceptionally small bending radius, which enables the implementation of tight corners. This has been proven during the construction. The installation was much more flexible, simple and faster.

One aim of the investment was to make the operation of the system more economic and energy-efficient, thus the condensing boiler were augmented with a heat pump. The operation cost are further decreased by the multi-layer PEX-based insulation inside the UPONOR pre-insulated pipe system, that can slip on one another (making bending easier). Along with flexibility and handleability, the other reason was that the quality of the insulation does not change significantly during time. The insulation is coated by a ribbed HDPE cylinder that provides mechanical protection for the system. 25 to 110 mm diameter UPONOR pipe-lines were used during the construction, which were cut to length and delivered in coil form. Both the heating and the water supply pipes were replaced during the modernization.

The construction of the pipe-line was finished in December 2014, thus in most of the winter the new, modern and efficient pipe system was used. By the end of the construction, the original idea was implemented: an easily installable, energy-efficient system was created for everybody's contentment.

# nbouot