

References

Uponor Industrial Floor-Heating at Halásztelek



Uponor involvement



960 m2

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In February 2015 the Uponor industrial underfloor heating system with size of 960 m² has been installed at the hall of M.H.M company.

In February 2015, an industrial plant was erected by M.H.M Ltd. with the application of 960 m2 Uponor industrial floor-heating.

Project Facts:

Location	Completion
Halásztelek, Hungary	2015
Building Type	Product systems
Industrial	Radiant Heating & Cooling
Address	Project Type
2314 Halásztelek	New building

Partners

M.H.M. Kft - Piliscsaba, Kálvária utca
54.
www.mhmkft.hu

The investor laid stress upon implementing an energy and cost efficient heating system. Following several occasions of co-

operation, the Uponor industrial floor-heating was chosen. Why? Because in an industrial or commercial environment, the reduction of heating costs depends significantly on the utilization of space and surfaces. The indoor areas of an industrial building have high values, thus the selecting of the heating system has significant impact on the costs. Standard visible heating units – ventilation components – require frequent cleaning, replacement, painting and maintenance.

The Uponor industrial floor-heating systems lack these disadvantages. The Uponor industrial floor-heating does not require any further maintenance. This decreases operation costs significantly, which results in a fast pay-off. The Uponor industrial floor-heating systems are characterized beneficial, as the system can be operated at low temperatures. The heat-loss is minimal between the heat provider and the distributor. Further savings can be achieved by e.g.: utilizing geothermal heat and waste heat from the production process. The choice of a suitable floor structure results in a higher efficiency.

The Uponor industrial floor-heating/cooling system is a low-temperature heat distributing system for industrial areas. During the planning and erection of industrial buildings, mainly the static and dynamic loads are considered. These may be the pressure of the wheels of vehicles or the static load of the legs of shelves or machines, or other mechanical or chemical impacts on the floor surface. The Uponor industrial manifold is designed for industrial buildings. Depending on the conditions on the site, the Uponor industrial manifold has to be installed to an extant wall (if available) or to a supporting structure created on site, before concreting. After that, the Uponor PE-Xa heating pipes have to be bent out from the heating surface with the bend clamps, under the manifold, then connected to the manifold. The supply pipes of the manifold can be connected either from opposite sides or from the same side. In some cases, a utility channel is created under or even inside the concrete plate for gas, plumbing and electric installations. In such cases, the Uponor industrial manifold can also be installed into the channel. Although it has to be turned upside down before installing it on the wall, so the heating supply pipes are facing upwards. The heating pipes have to be oriented towards the heating level with 90° pipe guiding elbow clamps. As the manifold may be up to 1 m below heating level, deaerators have to be installed in order to prevent the generation of air bubbles. The eventually left over air can be lead out into the main network with a water velocity above 0.4 m/s.

The optimal operating temperature is important for the industrial equipment, but what about people? The proper temperature of the working environment promotes working efficiency. Usually, the temperature of the floor is just as important as that of the air of the work space. The Uponor industrial floor-heating system helps with creating ideal work conditions. Its operation results in large radiant surfaces without ascending dust. With such properties, it can be applied perfectly in production halls or warehouses, wholesale and retail shops, where the product have to stay dust-free.

Benefits:

- long, maintenance-free life span
- fast pay-off with low-temperature heat sources
- good controllability with optimal utilization of the building areas
- applicable in any type of industrial buildings
- constant temperature
- no dust generation

Peter Kiss

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