References

Smart tanks for Rossmann distribution center



Uponor involvement

- 2 smart tanks DN2400 SN4, L=65m, V=290m³ and DN2400 SN8, L=22m, V=96m³ with pumping system.
- Installation of tanks and pumps performed by Uponor Infra service group,

Installation of Uponor Infra smart tanks at Rossmann Distribution Center

Uponor Infra has delivered two SN4 and SN8 DN2400 retention tanks with a total capacity of V=365m3, which will collect stormwater from warehouse roofs and be used for watering greenery.
Climate change and related extreme weather events, such as droughts and storms, increasingly affect cities, municipalities and businesses. A simple yet effective way to combat these phenomena is to improve local retention, i.e. retaining rainwater at the point of preciitation, delaying its runoff and storing it for use in dry periods. One of the places where such retention solutions are implemented is the Rossmann Distribution Center in Grudziądz.

Project Facts:

Location	Completion
Grudziądz, Poland	2022
Building Type	Product systems
Commercial Applications	Storm water

Partners

Investor:
Rossmann SDP Sp. zo.o.

General Contractor:
Commercecon Sp. z o.o. Sp. k.

Subcontractor:
Clima Komfort Sp. z o.o.

Modern logistics infrastructure using smart tanks

The Rossmann Distribution Center in Grudziądz is a key logistics facility for drugstores located in northern Poland. It started its operations in 2012, but due to the dynamic development of the company, a decision was made to expand it. As part of the investment, which lasted from April 2022 to March 2023, a new warehouse hall with an area of more than 11,200 sqm was built. The total area of Rossmann's warehouses in Grudziądz thus reached 35.5 thousand m².

During the expansion of the warehouses, it was decided to install a system for managing stormwater from the facility's roofs. Two smart tanks manufactured by Uponor Infra were used for this purpose. The first tank is DN2400 SN4, 65 meters long and has a capacity of 290 m³, while the second is DN2400 SN8, 22 meters long and has a capacity of 96 m³. Both tanks are made of durable high-density polyethylene (PEHD), which guarantees their durability of more than 100 years.

Collected stormwater is transferred to the receiver via pumping systems installed directly in the tanks. The ability to store and manage the collected water allows it to be reused for, among other things, watering the greenery around the facility or washing the streets. The installation of the tanks was carried out in stages due to challenging soil and water conditions. Work began with extrusion welding, which ensured the tightness and durability of the connections. In July 2022, the pumps were installed, and in August the control cabinet was installed. After the pump system was put into operation, training was conducted for the center's staff.

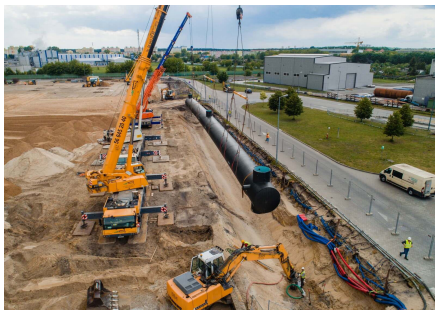
The Uponor Infra retention system offers many benefits:

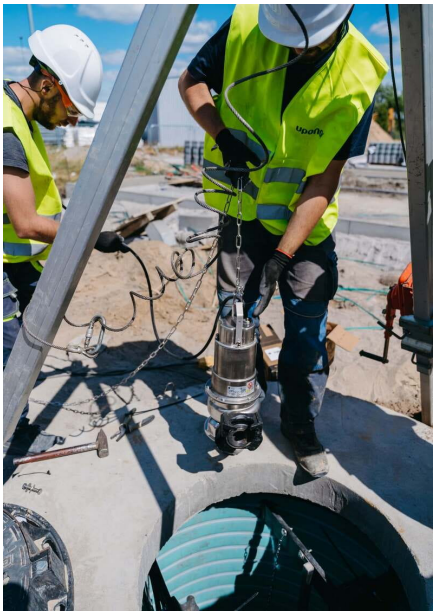
- Customization: The ability to tailor the tanks to the investor's specific needs.
- Durability and robustness: Resistance to dynamic traffic loads and stray currents.
- Modular design: Adaptation of the shape of the tanks to the available terrain.
- Cost savings: Reduction in costs associated with infrastructure maintenance, stormwater fees and tap water intake.

This was Uponor Infra's first smart tank deployment project requiring coordination and involvement of multiple company departments. The implementation of this project is an important step towards sustainable water management by large logistics centers. Thanks to the use of modern retention solutions, Rossmann's Distribution Center in Grudziądz is now better prepared for changing climatic conditions and violent weather events.

Smart tanks for Rossmann distribution center







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