References

Drainage of the S86 route at the Agata junction



Uponor involvement

- PEHD SN8 DN2500 retention tank with a length of 80 m and a capacity of over 392 m3
- Tank assembly performed by Uponor Infra service group

A polyethylene retention tank will protect a section of the S86 route in Katowice from flooding

A stormwater retention tank made of polyethylene with a capacity of nearly 400 m³ was installed along a section of the S86 expressway near the "Agata Junction" in Katowice in early October 2024. This is part of the road's drainage system, designed to enhance its resilience to climate change and prevent flooding during heavy storms.
The installation of an underground retention tank was one of the tasks in constructing the drainage system for the S86 section near the "Agata Junction" in Katowice, in the Silesian Voivodeship. During heavy rains and storms, massive water pools formed under the overpass and on access roads, often paralyzing traffic for many hours. A technical analysis commissioned by GDDKiA revealed that the existing rainwater pumping stations, along with the inlet and discharge pipelines, were no longer fit for operation due to insufficient capacity and poor technical condition.
The new drainage system is intended to improve the collection of stormwater from this section of the S86 expressway and adjacent commercial areas covering 2.6 hectares, with a total water outflow of approximately 330 liters per second. The investment involves demolishing, reconstructing, and constructing the stormwater drainage network, including the redevelopment of two pumping stations along with associated infrastructure, encompassing road, engineering, water and sewage, sanitary, traction, power, and telecommunications systems.

Project Facts:

Location	Completion
Katowice, Poland	2024
Building Type	Product systems
Transportation	Storm water

Partners

Investor:
GDDKiA

General contractor:
Keller Polska Sp. z o.o,

Subcontractor for the installation of
the tank:
HAMER POLSKA Sp. z o.o. Sp.k.

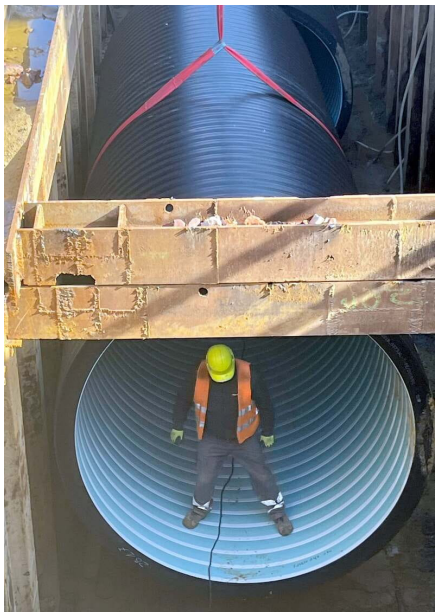
Flexible and durable polyethylene is the perfect solution for infrastructure

The characteristics of PEHD technology and the production methods of PEHD Uponor pipelines and retention tanks make them exceptionally suitable for infrastructure applications, including water supply and sewage systems. PE products are flexible, durable, and resistant to corrosion, chemicals, and abrasion. The use of extrusion welding for assembly ensures 100% system tightness and the transfer of all axial forces.
As a result, Uponor Infra retention tanks are exceptionally durable and long-lasting, with functionality estimated at over 100 years. They can be installed practicall anywhere, such as alongside or beneath transportation routes, as well as in areas of mining damage.
An additional advantage of this solution is the material homogeneity (pipe/tank and joints), as well as the durability of connections under varying soil pH conditions and the stored medium. Increasingly, customers also appreciate the fact that pipelines and tanks made of polyethylene have a lower environmental footprint throughout the life cycle compared to similar products made of traditional materials like steel or concrete.

Drainage of the S86 route at the Agata junction











GF Building Flow Solutions

Headquarter:
Ilmalantori 4
00240 Helsinki
Finland

Phone +358 20 129 211
Contact us

Email for communication requests: communications@georgfischer.com
Contact for Headquarter, PR, Offices in Australia, Dubai, International Sales and for Singapore

W www.uponor.com