

Retention tanks for the Jaworzyna Economic Activity Zone



Envolvimento da Uponor

- ✓ Battery of PEHD Weholite tanks DN1500 mm, length $L = 2 \times 285$ m, capacity $V = 1007 \text{ m}^3$
- ✓ Extrusion welding of tanks performed by the Uponor Infra Service Group and tightness test of the entire system

Development of the Jaworzyna Economic Activity Zone with Uponor Infra retention tanks

As part of the expansion of the Jaworzyna Economic Activity Zone (JSAG) in Jaworzyna Śląska, Uponor Infra supplied large-scale Weholite retention tanks with a total storage capacity exceeding $1,000 \text{ m}^3$, providing a reliable stormwater retention system for one of the region's key infrastructure projects.

The project titled "Construction, Reconstruction and Expansion of Roads within the Municipality of Jaworzyna Śląska, Including Associated Infrastructure (Pasieczna District), as Part of the Project: Development of the Industrial Zone through Site Servicing for the Operation of the Jaworzyna Economic Activity Zone (JSAG) – Task L" is currently being implemented in Jaworzyna Śląska. Co-financed by the Polish Government's Strategic Investment Programme (Polski Ład), the project is an important component of the development of the Jaworzyna Economic Activity Zone and aims to enhance the attractiveness of the region through the construction of modern road and utility infrastructure. Once completed, the investment will improve transport accessibility, road safety, and user comfort, creating better conditions for industrial and logistics development.

The general contractor for the project is KOBYLARNIA S.A., part of the MIRBUD Capital Group, while utility network works are being carried out by FERST Sp. z o.o. from Świebodzice. Uponor Infra has also been actively involved in the project, supplying large-diameter Weholite retention tanks manufactured from HDPE, performing extrusion welding of the tanks, and conducting leak-tightness testing of the entire system.

Dados do projeto:

Location	Conclusão
Jaworzyna Śląska, Poland	2025
Tipo de edifício	Product systems
Aplicações comerciais	Storm water

Parceiros

Investor:

Municipality of Jaworzyna Śląska

General Contractor:

KOBYLARNIA S.A. – MIRBUD Capital
Group

Subcontractor:

FERST Sp. z o.o., Świebodzice

More than 1,000 m³ of retention capacity for modern industrial infrastructure

Effective drainage is one of the key elements of every modern industrial development. In investment areas where roads, manoeuvring yards, and other paved surfaces are constructed, efficient stormwater management becomes particularly important. For this reason, the JSAG project incorporates a retention system based on Weholite tanks, ensuring safe storage and controlled discharge of excess rainwater.

The project includes a battery of underground retention tanks constructed from Weholite structured-wall HDPE pipes with a diameter of DN1500 mm and a total length of 2 × 285 metres. The overall storage capacity of the system is 1,007 m³, enabling effective collection of stormwater runoff from the development area and relieving pressure on the existing drainage infrastructure during heavy rainfall events.

The solution reduces the risk of local flooding, improves the operational safety of the road network, and enhances the resilience of the newly developed Jaworzyna Economic Activity Zone infrastructure to increasingly frequent extreme weather events, including intense rainfall.

Why is Weholite ideal for industrial developments?

For many years, Weholite retention tanks made from high-density polyethylene (HDPE) have been used in some of the most demanding infrastructure and industrial projects. They combine high structural strength with low weight, making them an efficient and durable solution for stormwater retention.

One of the key advantages of HDPE is its resistance to corrosion and aggressive chemical compounds. In addition, the expected service life of the system exceeds 100 years, significantly reducing operational and maintenance costs throughout the infrastructure lifecycle.

In industrial areas, resistance to ground settlement and dynamic loads generated by heavy vehicle traffic is particularly

important. Thanks to the flexibility of HDPE, Weholite tanks maintain full functionality even under demanding ground and operating conditions.

Another significant benefit for both contractors and investors is the modular design of the system. The low weight of the components, limited number of joints, and possibility of prefabrication considerably accelerate installation. This translates into shorter project delivery times and more efficient site operations.

Extrusion welding ensuring long-term durability and leak tightness

As part of the project, specialists from Uponor Infra's Service Group performed extrusion welding of all tank connections. Extrusion welding technology creates homogeneous and durable joints between HDPE components, ensuring a high level of leak tightness throughout the system. The method provides joint strength comparable to that of the parent material itself, resulting in reliable, long-term operation.

An additional advantage was Uponor Infra's leak-testing method, which does not require filling the tanks with water. This solution significantly reduces the duration of technical acceptance procedures and eliminates the costs associated with filling and subsequently emptying large retention structures.²

Modern stormwater retention supporting regional economic development

The investment in Jaworzyna Śląska demonstrates the crucial role that modern water, wastewater, and transport infrastructure plays in the development of industrial zones. Effective stormwater management has become an integral part of planning investment areas, influencing both user safety and the operational efficiency of the entire economic zone.

Thanks to the installation of Weholite retention tanks with a capacity exceeding 1,000 m³, it was possible to create a durable, leak-tight, and resilient retention system that will support the development of the Jaworzyna Economic Activity Zone for decades to come. This project is another example of the successful application of Uponor Infra solutions in strategic infrastructure developments across Poland.

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