From Service to Self-Sufficiency

Success Story – Riga Waterworks and Comprex

Riga Waterworks has consistently pursued excellence in maintaining its drinking water network, tackling challenges from manganese deposits to large-diameter pipelines. Partnering with Comprex® enabled the municipality to adopt innovative cleaning technology and build long-term operational independence. Today, Riga Waterworks combines expertise and technology to ensure safe, reliable, and high-performance drinking water system for its residents.

2014
Tackling a Major Challenge

In 2014, Riga Waterworks faced a major challenge in safeguarding the quality and performance of its drinking water network. Cast iron pipelines ranging from DN 100 to DN 400 were heavily burdened with manganese deposits. The Russian valve system, which did not allow full opening, made conventional cleaning methods such as pigging impossible. Traditional water flushing was also ineffective in removing the deposits.

Using Comprex®, large volumes of deep black, turbid water were discharged over an extended cleaning period until the pipelines were clean. To maintain optimal conditions, regular cleaning every 5–10 years was recommended.

2016
Scaling Up to Large Diameters

Two years later, Riga Waterworks embarked on an even more ambitious project: cleaning major pipelines up to DN 1000. This required four Comprex® Pulse3000 trailers, operating in shifts around the clock for four weeks.

The work posed significant logistical challenges: daily trailer refuelling, night-time illumination, adapting injection points to local hydrant standards, and managing safe discharges to rivers, lakes, or forest areas. Off-road vehicles were used to position the trailers in difficult terrain. Despite these demands, the project was completed successfully and strengthened confidence in Comprex® technology.

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2016
Investing in Self-Sufficiency

Encouraged by these results, Riga Waterworks invested in its first Comprex® Pulse3000 trailer — giving the utility the ability to clean its 1,000 km network independently. This step ensured full control over scheduling and operations, keeping both distribution lines and major transfer lines in optimal condition through preventive maintenance.

2024
Expanding Capacity for a Bigger Network

By 2024, Riga Waterworks had further strengthened its commitment to pipeline hygiene. To expand capacity, especially for mains up to DN 800, the utility purchased two additional Comprex® Pulse3000 trailers.

With three trailers in operation, Riga Waterworks now combines a decade of experience with proven technology to maintain regular cleaning, respond swiftly to water quality issues, and safeguard the drinking water supply for the people of Riga.

Conclusion

From the first demanding cleaning service in 2014 to a fully self-sufficient operation in 2024, Riga Waterworks has transformed its approach to drinking water network maintenance — setting a benchmark for long-term operational excellence.

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