

Reference project
**Distribution pipelines
Latvia**

Figure 1: synchronised Comprex® units in use

Cleaning of distribution pipelines DN 800 and DN 1000 in Latvia**Task**

- cleaning main distribution pipelines of a large Baltic city using the Comprex® procedure
- removing of easily mobilised deposits
- decreasing pressure drop of the pipe
- recovery of pipeline performance

Specifications

- nominal diameter DN 800, length approx. 19,5 km
- nominal diameter DN 1000, length approx. 8,5 km
- material cast iron, year of manufacture 1900 to 1960
- material steel, year of manufacture after 1960
- 4 pumping stations, supply pressure up to 4,5 bar

Cleaning using the Comprex® procedure

- mechanical cleaning process by using treated compressed air and drinking water
- operation of synchronised working Comprex® units: 3 units for DN 800, 4 units for DN 1000 (Figure 1 and Figure 2)
- cleaning in sections by using different injection locations along the pipeline
- length of cleaning sections between 0,5 and 2 km
- injection using adaptor connections at hydrants (Figure 3)
- discharge to suitable catch basins, using temporary pipelines if necessary (Figure 4)
- 8 technicians in shift operation, 5 weeks on site

Result of Comprex® cleaning

- deposits mobilised and discharged (Figure 5)
- turbidity removed
- increased hydraulic properties due to decreased pressure drop
- performance restored



Figure 2: operation at night



Figure 3: synchronised injection using adapter connections



Figure 4: temporary pipeline for discharge



Figure 5: flushing water with mobilised deposits at discharge point