

Sewage pipelines to sewage treatment plant - HDD method



Implication d'Uponor

- ✓ PE-HD WehoPipe pipes dzxe 1033.2 x 75.9 SDR 13.6 MOP 12.5 – 3101 m, PE-HD WehoPipe PN 10 SDR 17 DN 630÷1000 mm – 8916 m

Building of forced sewage pipelines to sewage treatment plant - HDD method

In 2007 in Szczecin, a series of record-breaking in the European scale number of crossings of a high dimension PEHD pipeline under a water obstacle made with a horizontal drilling method was completed in Szczecin.

In 2007 in Szczecin, a series of record-breaking in the European scale number of crossings of a high dimension PEHD pipeline under a water obstacle made with a horizontal drilling method was completed in Szczecin. The engineering work was done within the "Improving water quality in Szczecin" programme.

Connaissance du projet

Location	Achèvement des travaux
Szczecin, Poland	2007
Type de construction	Product systems
Bâtiment public	Sewer Municipal
Type de projet	
Nouveau bâtiment	

Partenaires

Contractor:

Hydrobudowa 9 .I.B. S.A. from
Poznań

The contractor scheduled using 3 different pipeline founding technologies: open excavation, microtunneling and horizontal drilling, where 6 largest crossings under water obstacles with the total length of over 3 km was done without excavation. The open excavation and microtunneling technology used standard PEHD WehoPipe pipes with DN 1000 x 59.3 mm PN 10 SDR 17. In the tunnels made by horizontal drilling, due to very hard geological conditions and founding at the depth of ca. 20 m, pipes with thicker outer walls were applied (d_z 1033.2 x 75.9 SDR 13.6 MOP 12.5). The pipes were produced and delivered to the site in 15-metre sections to minimise the number of welds on the pipeline course.

In December 2006 after making pilot drilling, the first actual drill was made at the Customs Office. 460 and 465 m long sections were pulled into the drill under the Oder. The pipeline sections under the Parnicki Canal - 360 and 570 m long were founded in February 2007. With regard to a lack of space to mount the pipeline near the crossing, they had been welded on the Pucka Island, launched and transported by tugs to the site. In the case of the shorter section the whole pipe was pulled out of water and placed on rollers. The longer section was almost entirely pulled directly from the canal. It is worth noticing that it was the first in Poland installation of such a large polyethylene pipe transported and mounted almost completely from water. The pipelines were founded at the level of Pucka Island between March and April 2007. 620 m and 626 m long pipes were installed, breaking a new European record in the length of a large-dimension pipeline pulled into an HDD drill.

Building of forced sewage pipelines to sewage treatment plant - HDD method



