



Project: Sewer main Szeged. | **Location:** Szeged, Hungary

Background: Sewage tunnel to newly built treatment plant.

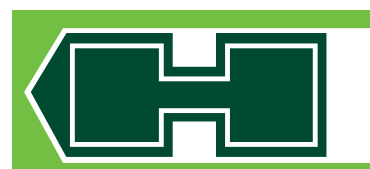
Contractor: Alterra Építőipari Kft.

Client: City of Szeged.

Construction method: Pipe jacking. | **Tunnel length:** 7 x approx. 500m.

Challenges: Groundwater. Citytunnelling. Limited space conditions.

EPB 2000 | Sewage Tunnel | Hungary.



- Launch shaft with jacking unit.
- View of the constructed tunnel.
- Recovery of the EPB 2000 from the narrow target shaft.



FUNCTION
SEWAGE TUNNEL
SOIL
CLAY
SAND
SILT
TUNNEL LENGTH
7x approx. 500m
DIAMETER (ID)
2,000mm
CHALLENGES
GROUNDWATER
CITYTUNNELLING
LIMITED SPACE
CONDITIONS
EXECUTION DATE
2005 / 2006

New sewer for Szeged.

Herrenknecht tunnelling technology extends Szeged's underground infrastructure. Szeged, one of the largest cities in Hungary after Budapest, has modernized its sewerage system. Nearby the winter port in the City's southwest, a new treatment plant was set up. To direct the waste water from the suburbs to the treatment plant, a new main sewer with a total length of 3.45km will be installed towards the freight depot, where it will be connected with the existing sewerage system. A Herrenknecht EPB 2000, will cross a nature reserve as well as residential areas and streets with limited space conditions. The tunnel alignment consists of

six straight tunnel stretches, some of them more than 500m long, and a curved drive with a radius of 800m.



MACHINE TYPE
EPB 2000
OD: 2,420mm
POWER: 315kW
RPM: 0-5rpm
MAX. TORQUE: 820kNm
WEIGHT: 60t
CUTTER HEAD
STANDARD
GUIDANCE SYSTEM
U.N.S. / GNS-P
CONSTRUCTION METHOD
PIPE JACKING

Safe and fast.

Adapted to the individual project conditions, Herrenknecht trenchless technology provides safe and fast installation of jacked pipes. In April 2005, the tunnelling process began at the jobsite directly adjacent to the seawall of the winter port, below the water level of the river "Tisza". Soon after construction began, the City issued a flood warning. The EPB 2000 handled the high groundwater levels caused by the freeze-thaw cycle and flooding safely and without settlement. The newly formed jobsite team masters the project perfectly. Maximum daily production rates of 33m on the second drive are proof of their skill and expertise as well as organized jobsite logistics.



The seawall of the winter port was safely passed during the first drive.

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