

Underwater tunnel under the Dead Vistula river

Underwater tunnel under the Dead Vistula river is located in Gdańsk, which is the largest city in the Northern Poland. It is located on the Baltic coast and it is Poland's principal seaport and important industrial centre.

The purpose of the tunnel is to link the airport with seaport and open a high capacity road success to the harbour in Gdańsk. The tunnel connects two routes: one headed towards the airport and the other one headed straight to the harbour. Both of them previously reconstructed, which underlines that that the tunnel was a part of a huge investment that included several projects. When it comes to the design of the tunnel, it consist of two tubes, each has 2 road lanes. The total length of the tunnel is 1.4km and its lowest point is at 35m. The tubes are linked with 7 emergency exists designed for pedestrians to pass.

Why is the tunnel so important? It is the first tunnel that used drilling method. The machine, specially designed for this investment, is called Tunnel Boring Machine (TBM). Its diameter 12.56m makes the tunnel the largest diameter tunnel in Poland. It was also a big challenge for polish engineers due to extremely difficult geotechnical conditions, so when the tunnel was opened on 23.04.2016 it was a huge accomplishment. On the first day 30 000 cars passed through the tunnel.

The tunnel is considered by polish authorities as an impressive investment that has important local and regional impact in the mobility of the area. It was a bold and unique challenge from an organisational and engineering point of view.