



Plomin thermal power plant in Croatia

Geotechnical analysis and preliminary design
2014 - 2016



CROATIA - Plomin

Client

ALSTOM POWER
SYSTEMS



The Project

The Plomin C project consists of the construction of a coal-fired thermal power plant on a site already accommodating two plants in operation in the Istria region of Croatia. Units 1 and 2 were built in 1969 and 2000, respectively, and Plomin C will double the capacity of the site, even after the dismantling of unit 1.

The Plomin C project includes the construction of a new production unit (on the present storage area), a new coal storage area, a harbour, a conveyor belt, a pumping station and a tunnel for the cooling system.

The project location is in a geological environment consisting mainly of rock (limestone).

Our Services

In this project, TERRASOL was contracted by ALSTOM to work on the drafting of a geotechnical analysis and preliminary design, on the preparation of the specifications for additional soil investigations, and on the analysis of these data for the structures design.

The investigations have been carried out by IGH (vertical drilling and geophysics for the power plant), Moho (offshore geophysics and tunnel) and Züblin (horizontal drilling), under the supervision of a TERRASOL engineer. They were executed in 2 phases (2014 and 2015 ; total duration of 2,5 months) and included 25 geophysical profiles and 78 boreholes (total length 1570 m).

After these investigations, TERRASOL could finalize its analysis of geotechnical data, and define the stratigraphic models as well as the geotechnical assumptions. We then defined the most relevant foundations system, with a pre-design of the foundations and of the retaining structures for the tunnel portals according to the applicable standards.

Key features

- Geotechnical analysis
- Definition and supervision of additional soil investigation campaigns
- Pre-design of the foundations and of the retaining structures for the tunnel portals