

Construction of Stone Columns, Piles and Diaphragm Wall, Punta Catalina, Dom. Rep.



Soil improvement works with three stone column installation units and three pre-drilling units

The Dominican Republic frequently experiences massive blackouts. Often the entire island nation, which has an area of approximately 49,000 km², is affected. A new coal-fired power station, currently being built about 40 km from the capital city of Santo Domingo, should solve the country's power problems. Responsibility for the Punta Catalina project is in the hands of a consortium of three companies – Construtora Norberto Odebrecht S.A., Maire Tecnimont SpA and Ingeniería Estrella SRL. With this large power station, the national electrical utility company CDEEE – Corporación Dominicana de Empresas Eléctricas Estatales – hopes to substantially improve the power supply in the country.

In September 2014, the consortium Odebrecht-Tecnimont-Estrella awarded BAUER Fundaciones Dominicana S.R.L. – a subsidiary of German BAUER

Spezialtiefbau GmbH – the contract to improve the soil and construct the foundations for this power station.

The scope of works executed by Bauer included 210,000 lin.m stone columns to a depth of 17 m and with a diameter of 1 m. Furthermore, the construction of 70,000 m polymer-supported bored piles with diameters of up to 1.2 m and pile depths of up to 35 m. The 12,060 m² diaphragm wall is 1 and 1.2 m thick and up to 31 m deep. One 120 ton crawler crane with cable grab equipment, three BAUER BG 28 large diameter rotary drilling rigs and three vibroprobe units were utilized to complete the works, in addition to auxiliary cranes and small drilling rigs.

BAUER Fundaciones Panamá S.A. significantly supported the sister company BAUER Fundaciones Dominicana S.R.L. by providing equipment and personnel.

Several project milestones for our work scope had to be reached during the execution period. The soil improvement works have been successfully finished in December 2015. The foundation piles for the generator turbines and chimney were also finished in 2015, while the remaining foundation pile works and the diaphragm wall works were successfully completed in May 2016.



Diaphragm wall installation

Client:	Corporación Dominicana de Empresa Eléctricas Estatales (CDEEE)
Employer:	Consorcio Odebrecht-Tecnimont-Estrella
Consultant Engineer:	Stanley Consultants, Inc.
Execution:	BAUER Fundaciones Dominicana S.R.L.
Scope of works:	<ul style="list-style-type: none"> ▪ Installation of 210,000 lin.m stone columns ▪ Construction of 70,000 m polymer-supported bored piles with diameters of up to 1.2 m ▪ Construction of 12,060 m² diaphragm wall, 1 and 1.2 m thick and up to a depth of 31 m
Construction period:	September 2014 – May 2016