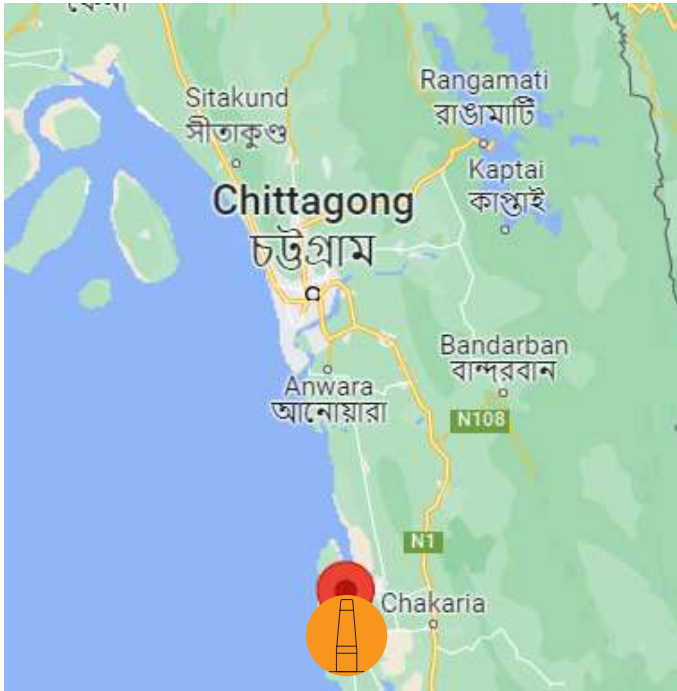




Matarbari, Bangladesh



Key facts about the plant

- 2x600MW ultra-supercritical coal-fired power plant
- Owner: CPGCBL, Bangladesh
- Contractor: POSCO, South Korea



Key facts about the chimney

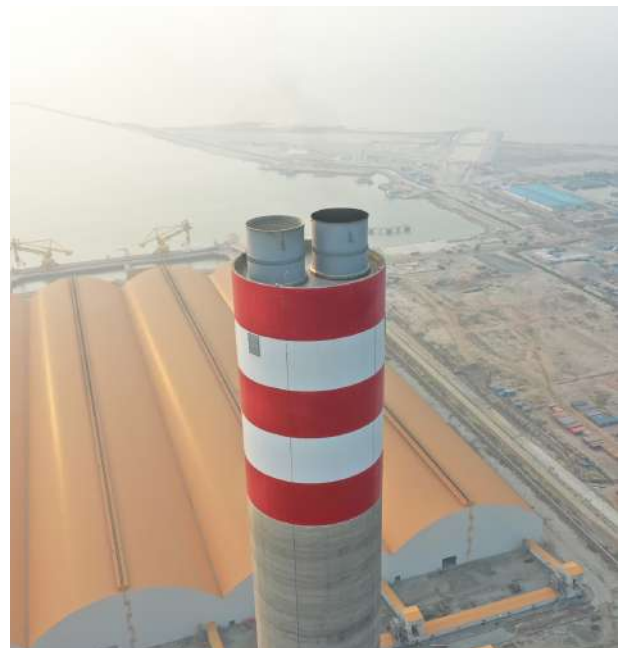
- Completed in 2023
- Concrete chimney
- H 275m
- Outer $\varnothing = 17.5\text{m}$
- 2 carbon steel liners, $\varnothing = 6,300\text{mm}$ each with borosilicate lining

The Matarbari power plant is constructed in Maheshkhali Upazila of Cox's Bazar District in southeastern Bangladesh.

The power plant is developed by the Coal Power Generation Company Bangladesh (CPGCBL), a state owned enterprise of the People's Republic of Bangladesh, and is expected to account for 10% of the total generation capacity of the country. POSCO E&C is in charge of civil engineering for the power plant and the construction of the coal processing facilities and subsidiary facilities. FERBECK INTERNATIONAL SA has been awarded an EPC contract for one 275 meters-height concrete chimney by POSCO, South Korea.

The scope of work includes:

- foundation
- concrete shell
- outer shell coat
- steel platforms and walkways
- borosilicate as internal protection
- all other steel elements (doors, windows...)
- access lift and ladders
- electric system (lighting, inner power supply, aircraft signalization lamps...)
- lightning protection system

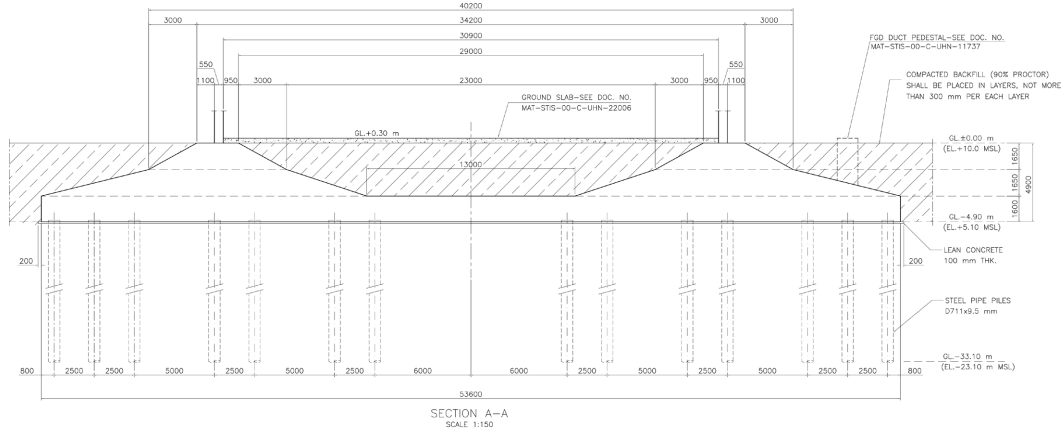




Foundation

The foundation is made of 7000m³ of concrete with the following size:

- 53.6m diameter
- h 6m at EL. -4.9m



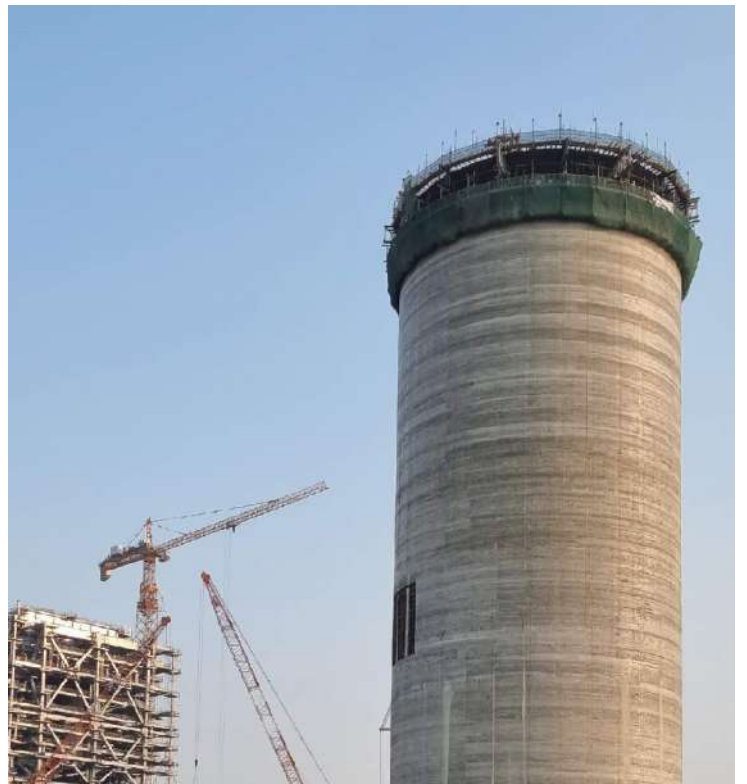


Concrete shell

The outer concrete shell is made of 6965m³ of concrete with the following size:

- 32m (bottom), 17.5m (top)
- h 275m

The casting is performed with a slipform operating 24/7.



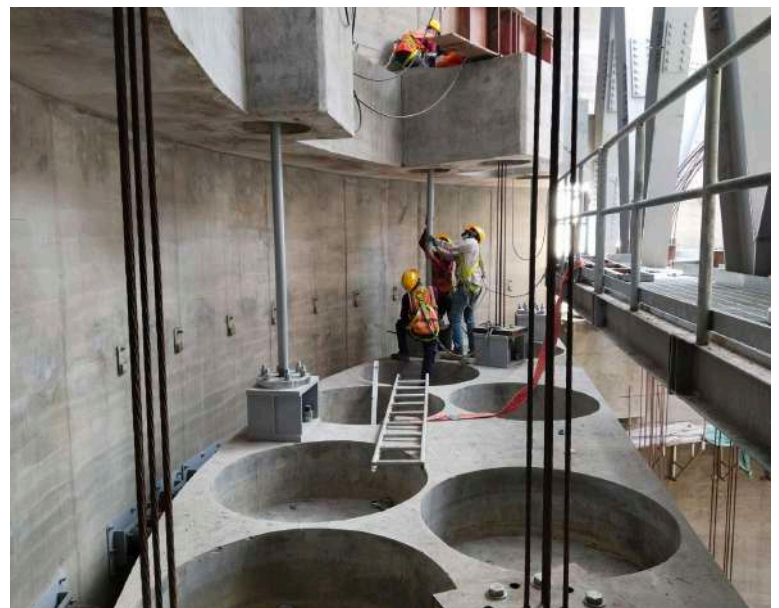
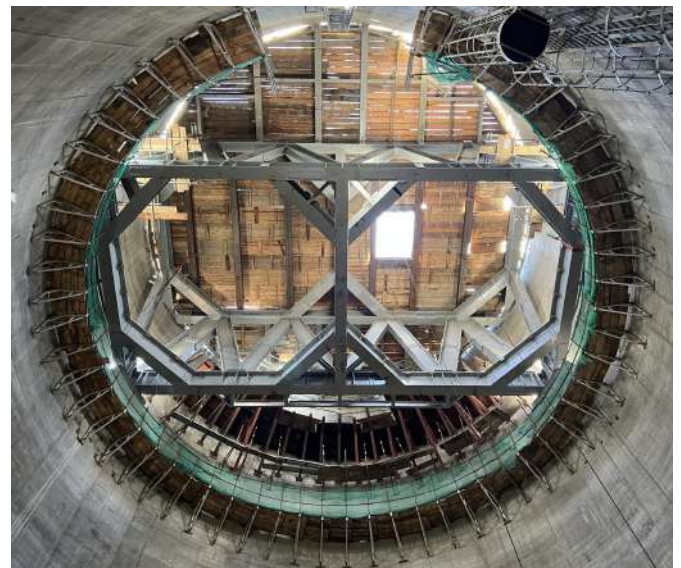
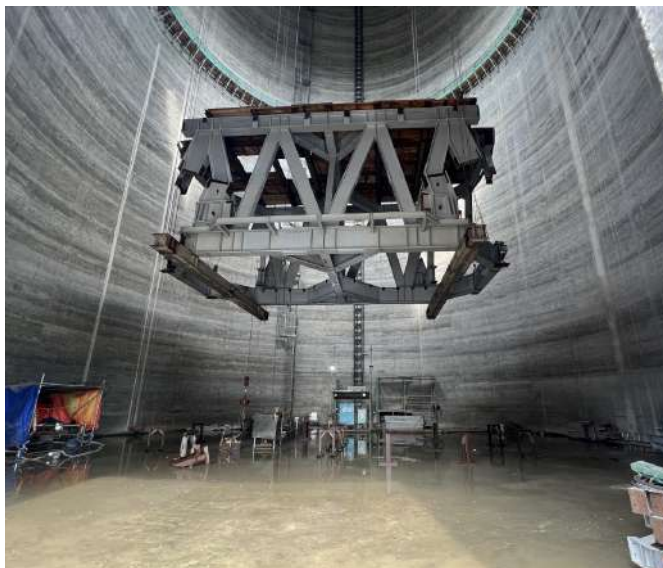


Platforms

5 platforms are installed inside the structure:

- roof platform at GL.+268.50m
- support platform at GL.+262.50m
- circular platform at GL.+182m
- guide platform & CEMS at GL.+86m
- hopper inspection platform at GL.+30m

The structure of support platform is made of a huge steel profile for bearing the load of the suspended inner liner.





Liners

The chimney has 2 carbon steel liners $\varnothing = 6,300\text{mm}$ each with borosilicate on internal surface.





| Overview of the plant

The Matarbari power plant is a 1,200 megawatt coal-fired power station. It consists of two thermal units based on ultra-supercritical coal-fired technology, with an installed capacity of 600MW each.

