

FERBECK INTERNATIONAL

Chittagong, Bangladesh



The Chittagong power plant is located on the banks of the Bay of Bengal, approximately 70km south of the Chittagong port city in the Banskoli sub-district of the Chittagong district, Bangladesh.

The project is being developed on a built, own and operate (BOO) model through a joint venture between S. Alam Group and SEPCOIII Electric Power Construction Corporation, China along with HTG Development Group, China. It is a project under China's ambitious Belt and Road Initiative. FERBECK INTERNATIONAL SA has been awarded an EPC contract for one 275 meters-height concrete chimney by SEPCOIII, China.

The scope of work includes:

- foundation
- concrete shell
- · outer shell coat
- steel platforms and walkways
- titanium cladding 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

Key facts about the plant

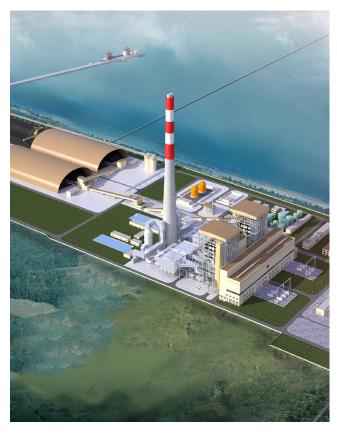
- 2x612MW ultra-supercritical coal-fired power plant
- · Owner: SS Power I Ltd. China
- · Contractor: SEPCOIII, China





Key facts about the chimney

- Completed in 2023
- Concrete chimney
- Conical and cylindrical shape
- H 275m
- Outer \emptyset = 32m (bottom), 17.5m (top)
- 2 carbon steel liners, \emptyset = 6,500mm each with titanium cladding







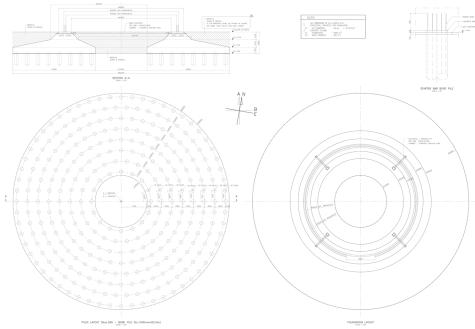
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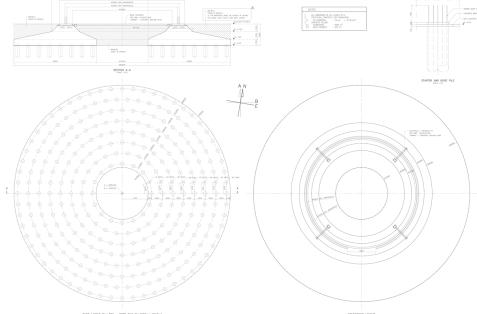
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Foundation

The foundation is made of 9600m3 of concrete with the following size:

- 60.5m diameter
- h 6m at EL. -6m











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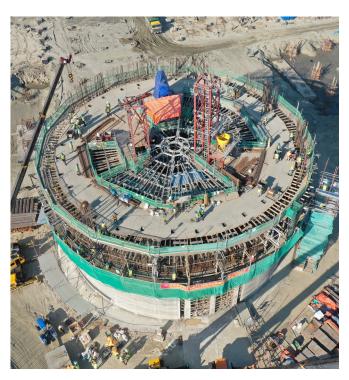
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Concrete Shell

The outer concrete shell is made of 9600m3 of concrete with the following size:

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

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













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Platforms

3 platforms and 3 walkways are installed inside the structure:

- roof platform at EL.+268.50m
- support platform at EL.+262.50m
- AWL walkway at EL.+183.58m
- guide and CEMS platform at EL.+81.03m
- expansion joint walkway at EL.+24.92m
- hopper walkway at EL.+16.72m

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







Liner

The chimney has 2 carbon steel liners \emptyset = 6,500mm each with titanium cladding on internal surface.







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Overview of the plant

The power plant is a 1.32GW coal-fired power generation facility. At full capacity, Chittagong coal-fired power project is expected to generate up to 10 billion kWh of electricity a year.











