

# CASE STUDY PETRON STEEL FRAME CHIMNEY PROJECT



## Project Participants

Owner	Petron Bataan Refinery
Client	Formosa Heavy Industries Corporation
Chimney EPC Contractor	BEC Holdings Ltd
Lining System	SCR-Ten 2

## CHIMNEY DESIGN AND BUILD

PETRON CHIMNEY



Petron Bataan Refinery was constructing 2 x 200 CFB boilers at Petron Refinery, Bataan, Philippines. Formosa Heavy Industries Corp. was the main EPC Contractor.

### Petron Steel Frame Chimney

BEC's project was for the construction of the twin flue steel framed chimney as part of the Petron Bataan refinery expansion programme that includes the construction of a 2 x 200T/H x 35MW power station. BEC was contracted to undertake the turnkey construction of the chimney by the main contractor for the power station, Formosa Heavy Industries. The whole of the structure was designed and fabricated in-house by BEC in Singapore and shipped to site.

### Detail of work by BEC

BEC was involved in the Design & Construction of the steel frame chimney, including supply and fabrication of steelwork frame and flues, erection of the steel frame and platforms, heavy lifting of flues, installation of AWLs, lighting, lightning conductor and earthing works. The project was completed and handed over on schedule.

### Challenges

- During the tower erection and liner installation, we were subjected to two (2) typhoons (Nesat and Nalgae) and unusually high rainfall from July to September



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# Petron Steel Frame Chimney details

**Chimney data:**

Height	70m
No. of steel flues	2
No. of platforms	3
Diameter of internal flues	2.1m
Base footprint	14.0m – 11.0m
Piles	16 Nos. x 500 x 25m long each
Pile cap	4 Nos x 3m x 3m x 1.25m deep

