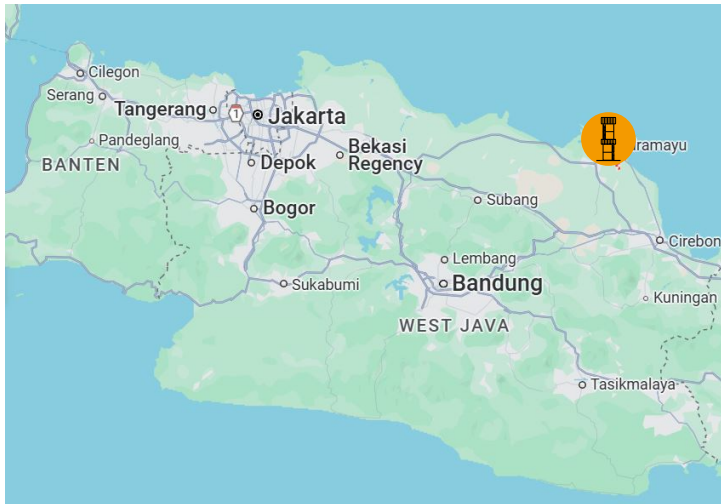




Balongan, Indonesia



Key facts about the plant

- Oil refinery
- Owner: PT Pertamina, Indonesia
- Contractor: ETI Consortium, Indonesia



Key facts about the chimney

- Completed in 2022
- Bypass single skin steel stack
- H 89m
- $\varnothing = 3,168\text{mm}$
- Vibrocast refractory lining system
- Free standing

Pertamina Refinery Unit VI (RU VI) is located in Balongan, Indramayu in West Java, Indonesia.

The location of RU VI in Balongan is strategic due to its proximity to key shipping lanes and transportation networks, making it an essential hub for the distribution of refined products across the nation and beyond.

Pertamina has been steadfast in its commitment to enhancing Indonesia's energy security and promoting economic growth.

FERBECK INTERNATIONAL SA has been awarded a Construction contract for the top 63m of one 89 meter-high-bypass-steel stack by ETI Consortium.

The scope of work consists in replacing the top 63m of an existing bypass steel stack.

In particular, it includes:

- the prefabrication of 6 sections of the stack
- the internal refractory is made with Rescobond castable material and undergoes a dry-out process





| Prefabrication of the steel stack and installation of V anchors



Raw materials



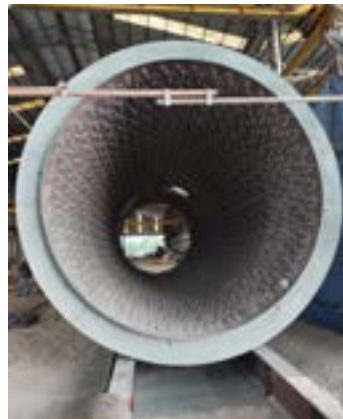
6 prefabricated sections



Detail of a section



V anchors



V anchors installed



Ready for paint



Painting (1)



Painting (2)



Segment relocation for lining installation



| Refractory lining installation



Study of the site arrangement for pouring



Sections in vertical position (1)



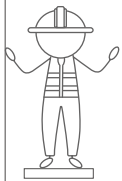
Sections in vertical position (2)



Sections in vertical position (3)

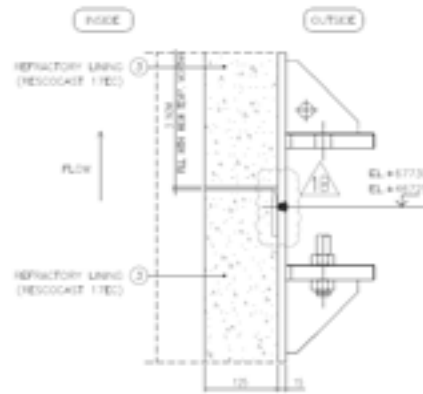


Formwork installation (1)





Formwork installation (2)



Refractory wall thickness is 125mm



Accurate control of the lining thickness



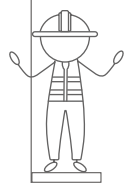
Concrete pouring



Concrete vibrator

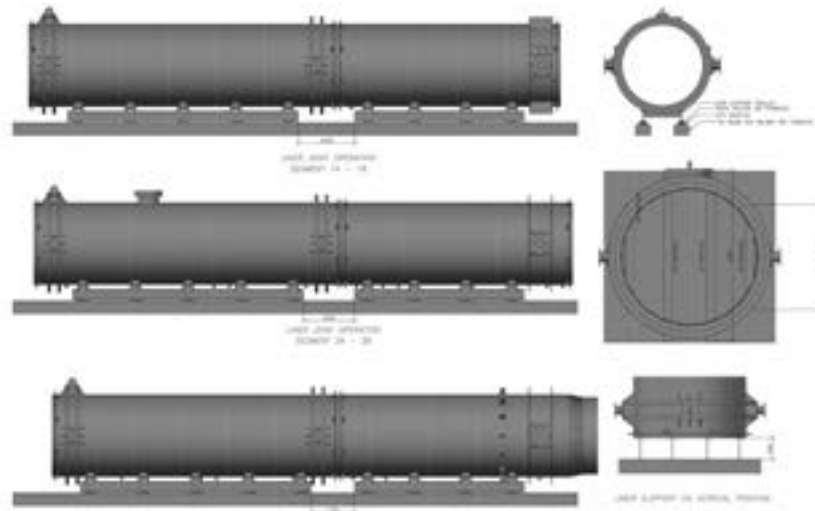


Hex-mesh for AA22 Rescobond material & Rescicast 17EC





Dry out and final fit up



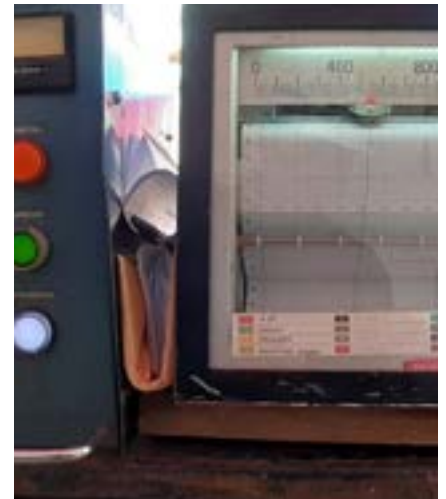
Study of the site arrangement for welding



Sections aligned for welding



Sections ready for dry out



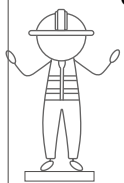
Concrete dry out (2)



Lay down in horizontal position

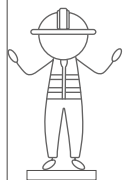


Concrete dry out (1)





| Transport to final destination





Overview of the plant

It is one of the refinery plants of Pertamina, a state-owner company in Indonesia. The refinery's operations encompass a wide range of processes, including crude oil distillation, conversion, and purification, all aimed at transforming raw petroleum into products such as gasoline, diesel, jet fuel, and petrochemical feedstocks that cater to both domestic and international markets.

