

### Barrow Island – LNG Plant in New Guinea

After the discovery of large deposits of gas in Papua New Guinea, the customer decided to create a remote artificial port at 3 km from the coast since the "LNG" boats would be unable to dock in this inhospitable coast due to mangrove swamps. The port has to be connected to the extraction site by pipelines. Each section of the pipelines is prefabricated in workshop, and equipped with their gateways, valves, piping, electrical wiring and plumbing (for gaz, water, fuel oil, compressed air, etc ...).

There were 29 different piperack modules, due to difference in weight, length, width and height. We have been requested to design a modular transporter adaptable to these 29 different combinations, for the loading on a ship. The transporter has to be able to work in the workshop and in the port as well,

The engineering project included all phases, from the design phase up to the detailed structural analysis with the redaction of a method statement for the use of the lift frame. The lift frames have been calculated according to the Australian norms.

### Inspection & Expertise of 2 horizontal Doosan boilers in Vietnam

We provide independent expertise in the design of boilers, used in electrical powerplants and others.

Based on our extensive experience in boilers, we can give a completely independent opinion.

The services can include :

An audit of the design which entails a detailed review and assessment of the current structure

An on-site visit and mission's report

Training of staff for operational expertise

Instructions for start-up and shut-down.

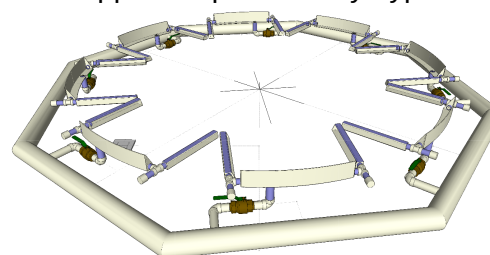
Comprehensive report of the analysis, audit and actions

### Fluidization to prevent by-pass in Belgium

An old traditional coal power plant had been reconverted to burn wood pellets instead of coal. The pellets are crushed and pulverized to be sent to the former coal burners. This transfer is carried out through harvesting hoppers connected to extraction screws.

It was observed that the complex network of hoppers did not correctly feed all the extraction screws.

It was then decided to perform a fluidization inside the hoppers to prevent any bypass.

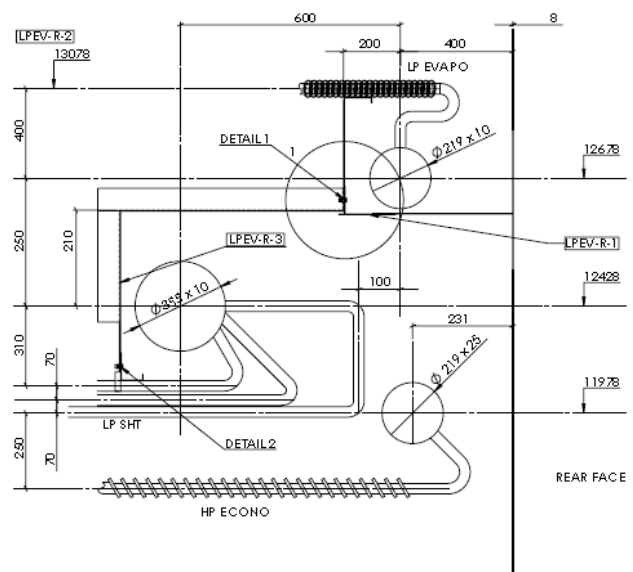


The work consisted of:  
Site visit & meetings  
Proposed solution  
Concept and detailed drawings  
Method mounting statement.

### Boilers in Singapur

After performing an inspection of the existing boilers, we proposed to improve the gas flow in the boiler areas under pressure by reducing the pressure loss as much as possible in the by-pass.

The work consisted of:  
Drawings  
Method mounting statement  
Supervision of erection work



The implementation of the proposed improvements has brought  
an increase of the output by 1 MW/h/unit