

PTT PLC

PTT Public Company Limited (Gas Separation Plant, Rayong)



Thailand

www.pttplc.com/en/

ANSYS® Fluent



Overview

PTT Public Company Limited (PTT) was established on December 29, 1978, during a time when the world was facing a second global wave of petroleum acute shortage. PTT advocated its primary mission of expediting production of adequate oil for domestic consumption. It was a drive for PTT to seek additional indigenous petroleum reservoirs for the benefit of the country.

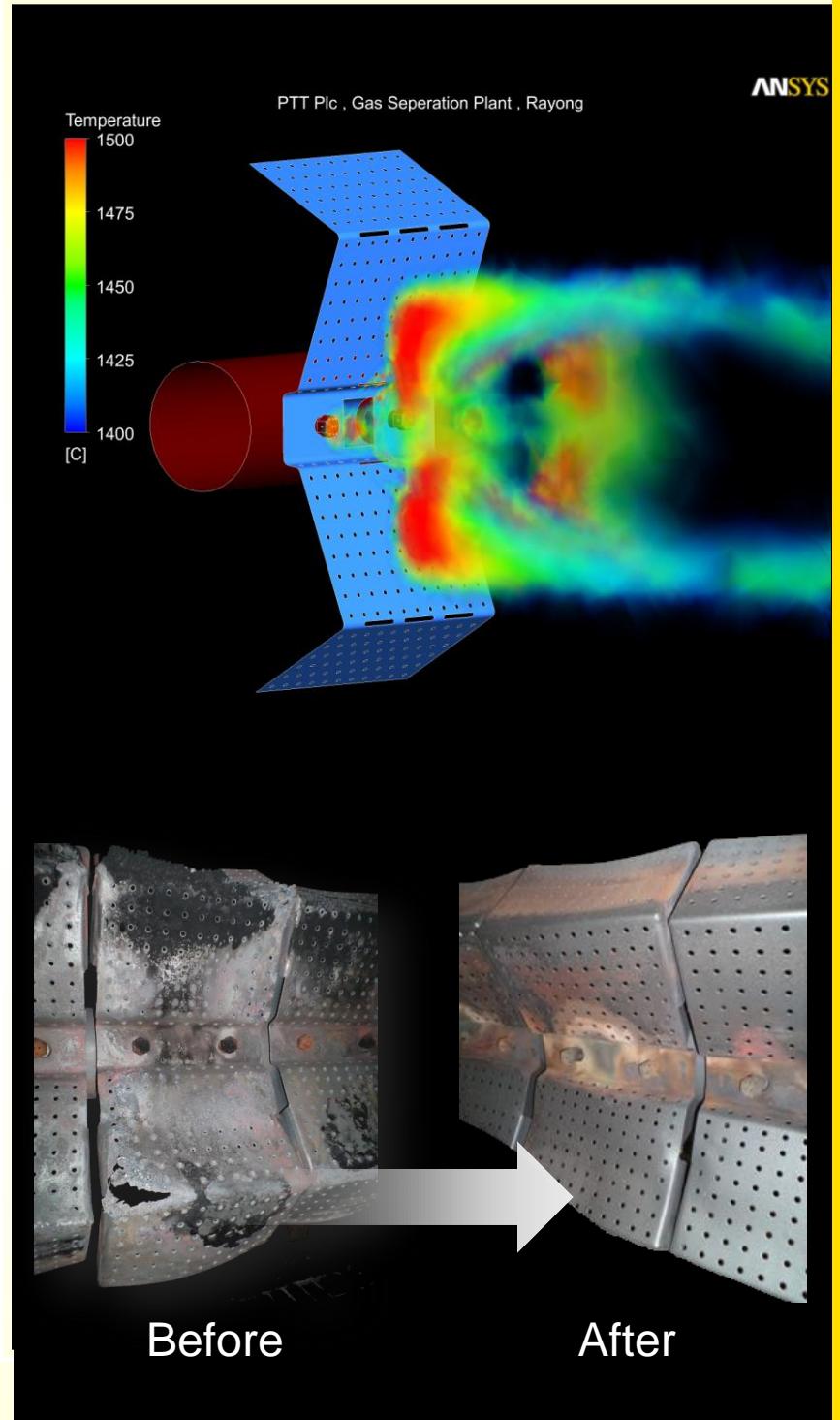
PTT Group is a group of leading national and integrated petroleum and petrochemicals companies under the align management throughout the business chain for synergy of common growth under the good corporate governance principles, with due regard for social, community and environmental responsibility to ensure their sustainable growth together.

The Group realised that enhancing organisation strength alone will not enable it to achieve its vision to be a Thai Premier Multinational Energy Company or to build a sustainable business. That can only be achieved through enhancement of every society where it operates. PTT Group has defined strategies for sustainable development by balancing High Performance Organization (HPO), Corporate Governance (CG), and Corporate Social Responsibility (CSR) to lay a strong foundation for the organization's development in the long-term and cope with the changing situation, locally and internationally, in a timely manner.

Testimonial

"Without ANSYS Fluent, we would not have been able to understand the cause of failure of the burner diffuser because it is extremely difficult to measure all parameters in the actual unit. Moreover we enhance our knowledge in terms of flow behavior and the temperature distribution inside the burner which helped us to resolve the problem effectively. We would like to thank CAD-IT Consultants for their intensive support and the existence of a supremely technical team to guide us through the project."

MR. SUNVARIS UYWATTANA
Senior Mechanical Engineer



Challenges

- Finding the solution and the cause of the problem to reduce production loss
- To obtain an accurate result of the temperature distribution inside the burner
- To analyse the unreachable unit in Gas Separation Plant process

Solution

- Understand the problem at the unreachable process
- By changing the material grade that has a higher temperature resistance than the hot spot in the burner
- By changing the burner geometry to reduce the maximum temperature

Benefits

- By understanding the cause of failure helps PTT reduce the frequency of operation shut down which significantly reduced loss of income risk
- Company's proficiency has been improved