



Thermax's CPFD a multifuel Boiler is utilized by the dairy company throughout the year for consistent steam supply

PROJECT BACKGROUND

Govind Milk and Milk Products Pvt. Ltd was set up at Phaltan, near Pune, The growth of the company also led to the socio-economic development in the geographical area in and around the company, At Govind, the best procurement and processing systems are employed to process milk and produce milk products. A fully integrated, processing unit with International standards, with the capacity to process in excess of 10 lac liters of milk every day, is currently in use in Phaltan.

Thermax's association with Govind Dairy is since June 2014 when we received an inquiry for boiler and there were several levels of technical discussion with Govind Dairy team and there Consultant at Phaltan. Finally, we were able to convince them that technically an AFBC boiler is more appropriate for Govind Dairy against RC influenced by FV. The order was commissioned in August 2016 since then the steam boiler is running successfully without any complaints.

SOLUTION PROVIDED

Our Heating system is required for Milk Powder plant which is a very critical application, the constant pressure of 16kg/cm² is required at the inlet of the dryer to maintain good quality Milk powder. CPFD 160 / 21 kg-Cm², F&A 100 DegC steam boiler was proposed after understanding customer's steam consumption pattern in the process. This plant uses steam to manufacture various products like ghee, Pedha, Icecream, Paneer consuming steam as a standard requirement in the process. The most important heating process required in the whole dairy process is the pasteurization of the milk for which consistent steam is supplied by the Thermax boiler.

**Boiler
Capacity
16 TPH**

**Steam to
fuel ratio
6.5***

**Fuel
Imported
coal**

**Fuel
moisture
content 30
%**

BUSINESS PROPOSITION

CPFD 16 TPH boiler ensuring energy (steam) delivered at an optimum price leveraging high-end automated boiler installation. Thermax has offered AFBC technology with air preheater recovery unit with 92 % efficiency. The fuel bed is fluidized by the injection of air from the bottom of the bed through a set of air nozzles. This results in very turbulent air and fuel mixing leading to very efficient combustion and heat transfer. This also results in the tumbling action of the fuel like a boiling fluid causing higher residence time for combustion. O₂ emissions are approximately 6% and a Zironia based O₂ analyzer is installed at the site for online Monitoring.



POSITIVE IMPACT

- **Govind Dairy team opened boiler first time after 6months to check for cleaning, however, found complete boiler system was clean. They have now started cleaning boiler only during annual IBR shut down/Inspection.**
- **Optimum Cost-Effective Steam Price**
- **Ensuring consistent quality at the right price**
- **Guaranteed Boiler Uptime**
- **Efficiency throughout the Product Lifecycle**



THERMAX PROCESS HEATING SOLUTIONS

A strategic business unit offers packaged boilers, thermal oil heaters, waste heat recovery boilers, hot water, and air generators. These are available in modular construction as a standard package configuration or a custom design for specific requirements. Innovated by a strong R&D that focuses on customer applications, we offer a range of heating systems designed to combust a wide range of solid, oil & gas fuels including biomass and heavy liquid fuels.