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## Energy conservation measures adopted to improve the energy efficiency in co-generation plant utility boiler

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The old saying “Excellence is the gradual result of always striving to do better. The noblest search is the search for excellence.” An integrated approach to achieve continuous improvement and reach towards excellence in Utility Boiler Operation. Operational Excellence is an urge and continuous improvements to achieve the highest level of performance which results in the overall improvement. In Co-generation plant (CGP), Utility Boiler (UB) is used to produce High pressure super-heated steam. This steam is used to drive devices like Turbine, Compressor and Pumps. This superheated steam is then converted into Medium pressure and low pressure steam at the pressure Reducing and De-superheating Station (PRDS) and finally distributed in the Refinery network. This abstract describes about various schemes and improvement measures to continuously improve the performance and efficiency of the Utility Boiler. Utility Boiler (UB) is a natural circulation; bi-drum, oil and gas fired boiler, supported at bottom. It produces high pressure superheated steam (40.0 kg/cm<sup>2</sup> and 450 deg C). During total power failure situation, it supplies steam for the safe shutdown of the Refinery units for approx. 20 minutes. So it is one of the most critical units of the Refinery. Improving its performance, reliability, flexibility and safety is very important. Various new indigenous Energy savings and safety measures and means have been discovered, adopted and applied to achieve the best operating results of the UB.

### Biography

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