



## **Establishing correct coal quality for achieving optimum boiler efficiency & performance – a case study in the Indian utility industry**

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**Abstract :** This paper outlines a preliminary effort towards efficient and reliable boiler operation, steam generation and the role of correct coal quality for the application which eventually impacts heavily on the economics of power generation. Coal properties can affect the efficiency, reliability and availability of both the boiler and the emissions control units. In this direction, an attempt has been made to study variation in boiler efficiency with coal properties in Indian context by carrying out a case study of 500 MW plant to understand the effect of coal quality on efficiency of boiler. It is concluded that establishing & securing right coal for Boiler is the key to achieving desired efficiency, emission levels and plant life.

**Keywords :** Coal quality, moisture loss, hydrogen loss, boiler performance, boiler efficiency.