

EVALUATION OF A 2 MW FLUIDIZED BED BOILER BURNING THAI LIGNITE

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Abstract

A small-scale 2 mw (th) fluidized bed water-tube boiler with a rated 3 ton/h steam production was designed, fabricated, commissioned and system performance tested. This paper presents parts of test results obtained on bed preheating, thermal and combustion efficiencies, heat transfer characteristics and gaseous emission control at varying air-fuel ratio. Overall, the boiler unit worked satisfactorily within the design criteria and confirmed the potential promising of FBC technology.