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CAPTURE OF SO₂ BY LIMESTONE IN A 71 MWE PRESSURIZED FLUIDIZED BED BOILER

ABSTRACT

A 71 MWe pressurized fluidized bed coal combustor was operated. A wide variety of coals were burnt under fly ash recycle conditions. Limestone was fed to the combustor as bed material as well as sorbent. The emission of SO₂ and limestone attrition rate were measured. A simple mathematical model of SO₂ capture by limestone with intermittent solid attrition was applied to the analysis of the present experimental results. Except for high sulfur fuel, the results of the present model agreed with the experimental results.

KEYWORDS

[fluidized bed combustion](#), [limestone](#), [sulfur dioxide](#), [attrition](#), [coal](#)

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